COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF PUBLIC UTILITIES

Petition of NSTAR Electric Company and Western Massachusetts Electric Company each d/b/a Eversource Energy for Approval of an Increase in Base Distribution Rates for Electric Service Pursuant to G.L. c. 164, § 94 and 220 C.M.R. § 5.00	D.P.U. 17-05

DIRECT TESTIMONY OF
Douglas P. Horton

Revenue Requirement Analysis

On behalf of

NSTAR Electric Company and
Western Massachusetts Electric Company
each d/b/a Eversource Energy

January 17, 2017

H.O. ______________

DIRECT TESTIMONY OF DOUGLAS P. HORTON

TABLE OF CONTENTS

DIRECT TESTIMONY OF

DOUGLAS P. HORTON

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Douglas P. Horton. My business address is 247 Station Ave, Westwood, Massachusetts 02090.

Q. By whom are you employed and in what position?

A. I am the Director of Revenue Requirements, Massachusetts, for Eversource Energy Service Company ("ESC"). In this capacity, I am responsible for all regulatory filings relating to the financial requirements of NSTAR Electric Company ("NSTAR Electric"), NSTAR Gas Company ("NSTAR Gas") and Western Massachusetts Electric Company ("WMECO") each d/b/a Eversource Energy. In this proceeding, I am testifying on behalf of NSTAR Electric and WMECO (together "Eversource" or the "Company"). As Director, Revenue Requirements for Massachusetts, I am responsible for the coordination and implementation of revenue requirement calculations for the Company, among other duties.

Q. Please describe your educational background and employment experience.

A. I graduated from Bentley College (now Bentley University) in Waltham, Massachusetts in 2003 with a Bachelor of Science degree. In 2007, I graduated from Bentley's McCallum Graduate School of Business with a Master's Degree in Business Administration. I was hired by NSTAR as a Senior Financial

Planning Analyst in August, 2007 and promoted to Project Manager, Smart Grid in March, 2010. In 2012, I was promoted to Manager, Revenue Requirements, Massachusetts and subsequently was promoted to my current role of Director, Revenue Requirements, Massachusetts, in February 2015.

Q. Have you previously testified in any formal hearings before regulatory bodies?

A. Yes. I sponsored testimony for WMECO's 2012 through 2016 Annual Solar Compliance Filings in D.P.U. 12-91, D.P.U. 13-174, D.P.U. 14-123, D.P.U. 15-151 and D.P.U. 16-173, respectively. Also, I testified in support of WMECO's Annual Rate Change filings in D.P.U. 12-88, D.P.U. 13-168 and D.P.U. 14-122; and in WMECO's Storm Reserve Recovery Cost Adjustment in D.P.U. 13-135, D.P.U. 14-126, D.P.U. 15-149 and D.P.U. 16-179. In addition, I sponsored testimony supporting NSTAR Electric's Annual Distribution Rate Adjustment/Reconciliation filings in D.P.U. 12-112, D.P.U. 13-172 and D.P.U. 14-121; and NSTAR Electric's Smart Grid projects in D.P.U. 11-92 and D.P.U 12-78. I also testified in the petition for approval of a gas service agreement between NSTAR Gas and Hopkinton LNG Corp. ("HOPCO") in D.P.U. 14-64, and in support of the HOPCO demand charge effective January 1, 2016 in NSTAR Gas Company's base-rate proceeding in D.P.U. 14-150, among other proceedings.

Q. What is the purpose of your testimony?

A. My testimony provides the revenue requirement calculation and existing revenue deficiency for NSTAR Electric and separately for WMECO. Although NSTAR Electric and WMECO are separate corporate entities at this time, they are fully integrated from a management and operational perspective, and the Company is intending to complete the corporate consolidation with a planned effective date of January 1, 2018, pending required approvals. The Company has submitted a filing to the Department of Public Utilities (the "Department") regarding the corporate consolidation of WMECO with and into NSTAR Electric in D.P.U. 16-108. As a result, certain elements of this filing are presented on a unified basis for NSTAR Electric and WMECO, while other elements will remain separate. For example, the Company is proposing standardization of tariff terms and conditions, line extension policies and rate classifications, where appropriate, but is not proposing to consolidate the revenue requirement calculation or base distribution rates at this time.

As Exhibit ES-DPH-2 (Consol.) I have presented a consolidated revenue requirement for NSTAR Electric and WMECO for illustrative, informative purposes. The Company is not requesting that the Department approve a consolidated revenue requirement at this juncture.

Additionally, my testimony provides the rationale and support for several other ratemaking issues, including: (1) establishment of the Eversource Storm Fund, as a carry-over of and improvement on the storm-funding mechanisms that NSTAR Electric and WMECO currently administer; (2) the Company's proposal for recovery of property tax associated with the asset-valuation change that occurred in 2012; (3) the Company's demonstration that recovery of merger-related costs associated with the NSTAR/NU merger is warranted; and (4) the Company's proposal for certain transfers and other adjustments to existing rate reconciling mechanisms proposed in this proceeding.

Q. In relation to the corporate consolidation of NSTAR Electric and WMECO, has the Company also filed for authorization by the Federal Energy Regulatory Commission?

A. Yes. On January 13, 2017, NSTAR Electric and WMECO jointly submitted an application to the Federal Energy Regulatory Commission ("FERC"), under Section 203 of the Federal Power Act, requesting approval to complete a corporate consolidation of NSTAR Electric and WMECO. This corporate consolidation would be accomplished by merging WMECO with and into NSTAR Electric, with NSTAR Electric as the surviving entity. FERC's procedures provide for the issuance of a decision in a relatively short time-frame. Therefore, the Company anticipates having FERC authorization to complete the corporate consolidation by the end of June 2017, to enable the planned effective date of January 1, 2018, coincident with the effective date of new rates resulting from this proceeding.

Q. Are you presenting any exhibits in addition to your testimony?

A. Yes. I am presenting the following 7 exhibits:

Exhibit Designation	Purpose
Exhibit ES-DPH-1	Direct Testimony of Douglas P. Horton
Exhibit ES-DPH-2 (East)	Computation of Revenue Requirement -- *NSTAR Electric*
Exhibit ES-DPH-2 (West)	Computation of Revenue Requirement – *WMECO*
Exhibit ES-DPH-2 (Consol.)	Illustrative Computation of Revenue Requirement *Consolidated NSTAR Electric and WMECO*
Exhibit ES-DPH-3 (East)	EXCEL Workpapers in support of NSTAR Electric Revenue Requirement
Exhibit ES-DPH-3 (West)	EXCEL Workpapers in support of WMECO Revenue Requirement
Exhibit ES-DPH-4	Other Workpapers
Exhibit ES-DPH-5 (East)	Other Revenues and Transfers – NSTAR Electric
Exhibit ES-DPH-5 (West)	Other Revenues and Transfers – WMECO
Exhibit ES-DPH-6	CWC/Lead Lag Study
Exhibit ES-DPH-7 (East)	Property Tax Expense – NSTAR Electric
Exhibit ES-DPH-7 (West)	Property Tax Expense – WMECO

Q. How is your testimony organized?

A. My testimony is organized into the following sections:

- **Section I –** provides the introduction to my testimony.

- **Section II –** discusses the comprehensive data review and verification process undertaken by the Company in compliance with certain settlement provisions approved by the Department in NSTAR/Northeast Utilities Merger, D.P.U. 10-170-B (2012) and to properly authenticate data utilized in developing the split test year for this proceeding consistent with the Department's requirements for the use of a split test year as most recently delineated in National Grid, D.P.U. 15-155, at 15-22 (2016).
- **Section III** - provides an overview of the revenue requirement analyses undertaken for NSTAR Electric and WMECO.
- **Section IV –** sets forth a comprehensive review of the Company's calculation of the test year revenue requirements, including a discussion of the normalizations and adjustments to test year operating expenses for both NSTAR Electric and WMECO, as well as a comprehensive explanation of the Company's proposed changes to the NSTAR Electric Storm Fund, previously approved in D.P.U. 05-85, and the WMECO Storm Reserve and associated Storm Recovery Reserve Cost Adjustment ("SRRCA"), previously approved in D.P.U. 10-70.
- **Section V –** describes the various adjustments to the per-books account balances as of June 30, 2016, for purposes of computing rate base for NSTAR Electric and WMECO, respectively.

- **Section VI –** sets out additional proposed ratemaking adjustments, including adjustments associated with Pension and Post-Retirement Benefits Other than Pension ("PBOP"), storm cost recovery, property tax recovery and Basic Service administrative costs.
- **Section VII** - summarizes the required lead-lag analyses for both NSTAR Electric and WMECO, which are presented in Exhibit ES-DPH-6.
- **Section VIII –** provides the conclusion to my pre-filed testimony**.**

II. Test Year Data Review

Q. Please describe the independent examinations undertaken in advance of this case.

A. The Company has completed two types of data examinations and verifications for this case. First, as part of the merger proceedings between NSTAR and Northeast Utilities, NSTAR Electric and WMECO entered into a settlement agreement with the Office of the Attorney General ("AGO" or the "Attorney General") and the Department of Energy Resources ("DOER") that was approved by the Department in NSTAR/Northeast Utilities, D.P.U. 10-170 (2012) ("AG-DOER Settlement Agreement").

Article 3.3 of the AG-DOER Settlement Agreement requires NSTAR Electric to present to the Department an independent accounting study no less than 60 days prior to its next base-rate case that includes: (1) an examination and verification of the Annual Returns to the Department for the four-year period ending December 31 of the test year; and (2) examination of the assets contained in NSTAR Electric's distribution rate base as of the test year end. In addition, Article 3.3 of the AG-DOER Settlement Agreement required that the independent accounting study must be conducted in accordance with the NARUC Rate Case and Audit Manual.

The systematic review required for the independent accounting study was to be conducted by an independent accounting firm identified through a competitive bid process conducted by NSTAR Electric in consultation with the AGO and the DOER, with the selection to be made by the DOER and the Attorney General, subject to the consent of NSTAR Electric. The costs of the independent study of NSTAR Electric's assets are specified as ineligible for rate recovery. As described below, this required examination and verification was performed for this case by the independent accounting firm selected by the AGO and the DOER, in consultation with Eversource, which is Ernst & Young, LLP ("EY").

Second, the Company's revenue requirement analysis in this case is based on a split test year period ending June 30, 2016. As documentation in support of accounting information relied upon in the revenue requirement for NSTAR Electric and WMECO, the Company has prepared pro-forma FERC Form 1 information, including account balances and activity for the split test year ending period, June 30, 2016. This information is provided as Exhibit ES-DPH-4, Schedule DPH-1 (East) for NSTAR Electric and Exhibit ES-DPH-4, Schedule DPH-1 (West) for WMECO.

To meet the Department's requirements for using split test year information, the Company engaged Deloitte & Touche LLP ("D&T") to conduct testing of the split test year data in order to verify that: (1) data contained in the FERC Form 1 and Form 3-Q information prepared for the split test year is from the books and records of the Company; (2) data included in the computation of the revenue requirement reconciles to the FERC Form 1 and Form 3-Q data, as appropriate; and (3) amounts included in the Company's calculations of revenue requirements agree to other amounts within the Company's filing, as appropriate. D&T also sampled account activity for certain expense accounts included in the cost of service to verify that expense activity was incurred in the test year.

Q. Has Eversource met the requirements associated with the AG-DOER Settlement for the independent accounting study?

A. Yes. Article 3.3 of the AG-DOER Settlement requires the preparation and filing of an independent study that includes an examination and verification of the Company's annual returns for the four-year period ending December 31 of the test year for the next rate case, as well as a verification of the assets contained in the

Company's distribution rate-base as of the test year end. In its final decision approving the AG-DOER Settlement Agreement, the Department directed the Company to submit the required information by a "date certain," which the Department identified as April 15, 2015. D.P.U. 10-170-B at 3, 66. The Department further directed the Company to present seven categories of financial information for each year of the rate freeze traceable to the Annual Return of NSTAR Electric. Id. at 65-66.

On April 15, 2015, the Company submitted the Verification of the Annual Returns of NSTAR Electric by EY. On that same date, the Company requested an extension to September 10, 2015 to provide the results of the rate-base examination. On September 10, 2015, the Company requested an additional extension until October 30, 2015

On October 30, 2015, the Company fulfilled its merger requirements by submitting the rate-base examination of NSTAR Electric by EY pursuant to Article 3.3 of the AG-DOER Settlement Agreement and the Department's directives in D.P.U. 10-170-B. The Company also submitted the seven categories of financial information for the years 2012 through 2014, as requested by the Department in D.P.U. 10-170-B at 66.

On November 16, 2016, the Company re-submitted the rate-base examination and verification of annual returns updated through June 30, 2016, which is the test year end for the Company's revenue requirement analysis in this proceeding.

Q. How was the independent accounting firm selected to conduct the required examination for NSTAR Electric in accordance with the terms of the AG-DOER Settlement Agreement?

A. In accordance with Article 3.3 of the AG-DOER Settlement Agreement, NSTAR Electric worked with the Attorney General's office and the DOER to conduct a competitive solicitation for an independent accounting firm qualified to perform the examination. To conduct the solicitation, NSTAR Electric, along with NSTAR Gas, developed a request for proposals ("RFP") in consultation with the DOER and the Attorney General, and the RFP was issued to five national accounting firms. NSTAR Electric and NSTAR Gas subsequently received two qualifying bids in response to the RFP, which were carefully evaluated using objective criteria.

Q. What was the result of the competitive solicitation?

A. The consensus of the Company, the DOER and the Attorney General was to retain the services of EY. EY was selected on the basis of the quality of its RFP response, the specific work plan proposed by EY, and the qualifications of EY representatives who would be working on the study. EY was retained to commence work on the NSTAR Electric independent accounting study, and also to conduct the same independent study for NSTAR Gas (although not required for NSTAR Gas by the AG-DOER Settlement Agreement).

Q. What was the scope of work assigned to EY?

A. The RFP specified the scope of work for verification of the Annual Returns and the examination of rate-base assets. For verification of the Annual Returns, the scope of work included verification of each of the Annual Returns in the four-year period ending December 31 of the test year period for NSTAR Electric, with procedures to compare company-prepared schedules to the balance sheet, income statement and supporting schedules contained within the Annual Returns; confirmation that the balance sheet and income statements contained within the Annual Returns agree to company-prepared schedules; and reconciliation of the company-prepared schedules to the audited financial statements. The scope of work for verification of Annual Returns also included a written report documenting the results of the study. Eversource further engaged EY to update the examination through the end of the test period for this case (June 30, 2016). The final report is provided herewith as Exhibit ES-DPH-4, Schedule DPH-2.

With respect to the scope of work for the examination of rate-base assets, the scope of work included verification of the assets contained in distribution rate base as of test year end for NSTAR Electric, with procedures covering each of the following topics:

i. Plant-In-Service – Verify the accuracy of the NSTAR Electric utility plant listing by comparing the listing to supporting documentation;

ii. Plant Held for Future Use – Compare the balance in Account 105 to supporting documentation and verify that the items are properly recorded in accordance with the FERC Uniform System of Accounts;

iii. Gains/Losses from Property Sales – Verify the accuracy of the gains and/or losses from sales of utility plant by reviewing documentation of transactions from which the gains and/or losses arose;

iv. Goodwill (not included in rate base) – Recalculate the annual amortization and unamortized goodwill balance;

v. Accumulated Depreciation – Compare accumulated depreciation balances by account to supporting documentation, and confirm that the calculation is based on the Department-approved depreciation rates; and

vi. Accumulated Deferred Income Taxes ("ADIT") – Compare ADIT to supporting documentation.

Q. Has the Company fulfilled the requirements related to the asset examination performed for NSTAR Electric?

A. Yes. On October 30, 2015 the Company submitted the results of the asset examination for assets in service as of December 31, 2014. On November 16, 2016, the Company submitted updated results for the period ending June 30, 2016, the test year in this proceeding. The asset examination for NSTAR Electric resulted in adjustments to both plant in service and the reserve for depreciation and amortization, as detailed in on Exhibit ES-DPH-3 (East), WP DPH-28, page 1, and WP DPH-29, respectively. The adjustments are further summarized on Exhibit ES-DPH-3 (East), WP DPH-28, page 3, with reference to the full reports provided as Exhibit ES-DPH-4, Schedule DPH-2. In summary, EY recommended that: (1) certain assets should be retired totaling $11,301,550 (Exh. ES-DPH-3 (East), WP DPH-28, page 3, lines 20-21 and Exh. ES-DPH-3 (East), WP DPH-29, column F); (2) certain assets should be reclassified between accounts totaling $6,651,075 (Exh. ES-DPH-3 (East), WP DPH-28, page 3, lines 23-26); and (3) certain assets should be removed from plant in service totaling $418,733 (Exh. ES-DPH-3 (East), WP DPH-28, page 3, line 28). The Company has adopted these recommendations and made changes to the plant in service and the reserve for depreciation and amortization, accordingly.

Q. Aside from these recommendations, does the result of the asset examination support the rate-base computation used in the NSTAR Electric cost of service?

A. Yes. As noted in the report dated November 14, 2016, through the course of its procedures, EY identified no errors that would materially affect the assets included in the distribution rate base of NSTAR Electric, which is approximately $2.7 billion (Exhibit ES-DPH-4, Schedule DPH-2, page 7 and page 36).

Q. Please describe the procedures used by D&T for its review of financial data for the split test year period.

A. As noted above, the Company retained D&T to perform certain procedures in relation to the test year data; the data contained in the FERC Form 1 prepared as of the end of the test year period for NSTAR Electric and WMECO; and certain other information used in the Company's revenue requirement. The purpose of these procedures was to comply with the Department's directives relating to the use of a split test year. The results of these procedures are provided herewith as Exhibit ES-DPH-4, Schedule DPH-3.

Q. Did the Company undertake any further analyses regarding the revenue requirements developed for NSTAR Electric and WMECO?

A. The Department requires that any company seeking to rely on a split test year demonstrate, as a threshold matter, that its proposed test year is reviewable and reliable and represents a full accounting of the company's operations for the test year period. See, e.g., Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid, D.P.U. 15-155, at 16 (2016). Additionally, the Department requires, at a minimum, that a company proposing to use a split test year be prepared to make a threshold showing that:

(1) test year account balances tie back to the account balances as reported in the company's Annual Return to the Department;

(2) the amounts reported therein were properly reviewed by an independent third party and are available for review;

(3) a meaningful year-to-year review of changes in expense levels and revenues is possible, such that the Department can determine whether the company's test year expenses and revenues are representative of its ongoing costs and revenues, are reasonable in amount, and account for any seasonal variability; and

(4) the company has properly recognized accruals booked to reserve accounts, including any end of period reconciliations of those account balances.

Q. How has the Company met the first requirement that test year account balances tie back to the account balances as reported in the Company's Annual Return to the Department?

A. To meet this requirement, the Company engaged D&T and collaborated with D&T to develop detailed procedures to be performed by D&T to confirm various aspects of the Company's financial data for use in the Department's ratemaking process. The procedures, among other objectives, were designed to verify that the balances contained in the revenue requirement analysis tie back to the balances reported in the FERC Form 1, utilizing FERC Form 3-Q information for mid-year periods, as appropriate. In addition, the Company has prepared Exhibit ES-DPH-4, Schedule DPH-4 (East) and Schedule DPH-4 (West), which provide the account level detail at the 6 digit FERC account level, along with (i) a mapping to the balances as reported on the Company's FERC Form 1; and (ii) an explanation of adjustments, if any. These schedules are provided for income statement and balance sheet accounts for both NSTAR Electric and WMECO.

Q. How has the Company met the second requirement that the amounts were properly reviewed by an independent third party and are available for review?

A. As described in detail above, in accordance with Article 3.3 of the AG-DOER Settlement Agreement, EY conducted an independent examination and verification study that included: (1) an examination and verification of the Annual Returns to the Department for the four-year period ending December 31 of the test year period, and (2) examination of the assets contained in NSTAR Electric's distribution rate base as of the test year end.

In addition, the procedures performed by D&T include a review of test year data contained in the FERC Form 1 prepared as of the end of the test year and a review of the FERC Form 1 data contained in the revenue requirement analysis, as applicable.

Q. How has the Company met the third requirement to enable a meaningful year over year review of expense and revenue levels?

A. The Company is finalizing a comparison schedule which will provide historical account data of expense and revenue activity for the years 2015 and 2016, as well as the split test year ending June 30, 2016. This exhibit will allow the Department to conduct a meaningful, year-over-year examination of expense and revenue levels encompassed in the split test year period, July 1, 2015 through June 30, 2016. Eversource Energy is currently in the processing of closing the books for its fiscal year end, December 31, 2016. Therefore, this exhibit will be finalized and submitted once the fiscal year-end closing is complete, which is anticipated to be within 45 days of this filing.

Q. How has the Company met the fourth requirement that the Company has properly recognized accruals booked to reserve accounts, including any end of period reconciliations of those account balances?

A. The Company has included several adjustments to test year data in order to ensure the proper recognition of expenses in the test year. To identify these adjustments, the Company conducted a review of beginning and end-of-period accrual activity to confirm that adjustments and accruals are properly reflected in the revenue requirement analysis. The result of this review is summarized on Exhibit ES-DPH-2 (East), Schedule DPH-6, page 4 and Exhibit ES-DPH-2 (West), Schedule DPH-6, page 4 for NSTAR Electric and WMECO, respectively. As shown therein, the Company has identified certain adjustments that are required to be made to test year revenues and expenses in order to remove the effect of out-of-period or non-recurring activity. These adjustments are described in more detail below.

III. Summary of Revenue Requirements Analysis

Q. What is the test year period that NSTAR Electric and WMECO used for the revenue requirement analyses presented in this case?

A. As noted above, the test year period used for the revenue requirement analyses is the 12-month period ending June 30, 2016.

Q. What is the "rate year" in this case?

A. The term "rate year" refers to the first 12 months during which the rates established in this proceeding will be in effect. The Company's filing in this proceeding is designed to establish new base distribution rates for NSTAR Electric and WMECO effective January 1, 2018. Therefore, the rate year is the period January 1, 2018 through December 31, 2018, and the midpoint of the rate year is July 1, 2018.

Q. Would you please summarize the NSTAR Electric distribution cost of service and resulting revenue requirement?

A. Yes. Exhibit ES-DPH-2 (East), Schedule DPH-1 presents the Revenue Requirement Summary for NSTAR Electric, computing a total cost of service of $913,849,251. For the rate-year ending December 31, 2018, the calculated distribution revenue deficiency is $60,194,386, based on adjusted test year revenues of $853,654,865. The computation of the NSTAR Electric revenue deficiency reflects total rate base of $2,734,402,771 and assumes a weighted cost of capital of 7.61 percent as supported by the testimony of Company Witness

Robert B. Hevert. Exhibit ES-DPH-2 (East), Schedule DPH-6 identifies expense adjustments.

Q. Would you please summarize the WMECO cost of service and resulting revenue requirement?

A. Exhibit ES-DPH-2 (West), Schedule DPH-1 presents the Revenue Requirement Summary, computing a total cost of service for WMECO of $172,087,315. For the rate year ending December 31, 2018, the calculated revenue deficiency is $35,663,045, based on adjusted test year revenues of $136,424,270. The computation of the WMECO revenue deficiency reflects total rate base of $440,871,528 and assumes a weighted cost of capital of 7.62 percent as supported by the testimony of Company Witness Robert B. Hevert. Exhibit ES-DPH-2 (West), Schedule DPH-6 identifies expense adjustments.

Q. Were the revenue requirements for NSTAR Electric and WMECO calculated in the same manner?

A. Yes. Below, I summarize how the revenue requirement calculations were performed. As noted below, in most cases the explanations are the same for both NSTAR Electric and WMECO.

Q. Did the Company make any adjustments to the test year Operating Revenues for NSTAR Electric or WMECO?

A. Yes. Exhibit ES-DPH-2 (East), Schedule DPH-5 and Exhibit ES-DPH-2 (West), Schedule DPH-5 present: (1) test year revenue per books; (2) normalizing adjustments to test year revenues; and (3) pro forma adjustments to other revenues. These adjustments are described in more detail in Section IV, below.

Q. Did the Company make any adjustments to the test year Operating Expenses for NSTAR Electric or WMECO?

A. Yes. The Company made adjustments to test year Operating Expense for both NSTAR Electric and WMECO to remove costs recovered through ratemaking mechanisms that operate outside of base rates; to normalize the booked test year amounts for ratemaking purposes; and to account for known and measurable changes in O&M expense levels occurring after the end of the test year and through the midpoint of the rate year, or July 1, 2018. The normalizations and adjustments reflect a number of increases and decreases. Exhibit ES-DPH-2 (East), Schedule 6 and Exhibit ES-DPH-2 (West), Schedule 6 provide a summary of all adjustments made to Operating Expenses for NSTAR Electric and WMECO, respectively. These adjustments are also described in more detail in Section IV, below.

Q. How have you computed the respective rate base for NSTAR Electric and WMECO for purposes of the revenue requirement analysis?

A. The proposed rate base for NSTAR Electric and WMECO in this case reflects plant in service through June 30, 2016, plus specific adjustment for certain major capital projects going into service after the end of the test year. The rate-base calculation is summarized on Exhibit ES-DPH-2 (East), Schedule DPH-27 and

Exhibit ES-DPH-2 (West), Schedule DPH-27 for NSTAR Electric and WMECO, respectively. As shown therein, the calculated rate base includes:

- Actual plant in service, accumulated depreciation and accumulated deferred income taxes as of June 30, 2016, including adjustments resulting from the rate-base verification conducted by EY, as described above;
- Projected capital additions for major projects going into service after the end of the test year but before the conclusion of this case, as described in more detail below and in the testimony of Company Witness Leanne M. Landry; and
- Other adjustments to rate base, such as reductions for customer deposits and advances and additions for materials and supplies, excluding fuel, ASC 740 regulatory assets and cash working capital.

Project documentation for major capital additions included as post-test year adjustments will be submitted in this proceeding with adequate time for review by the Department and the Attorney General. I will update the revenue requirement in this proceeding prior to the evidentiary hearings in order to update the estimated costs for these major projects to reflect the latest available information on each of these projects.

Q. What is the "Revenue Requirement Factor," referenced in Exhibit ES-DPH-2 (East), Schedule DPH-2 and Exhibit ES-DPH-2 (West), Schedule DPH-2?

A. On Exhibit ES-DPH-2 (East), Schedule DPH-2 and Exhibit ES-DPH-2 (West), Schedule DPH-2, for NSTAR Electric and WMECO respectively, I have calculated the operating income shortfall that exists based on the test year ended June 30, 2016 financial information, as adjusted. The Revenue Requirement Factor for NSTAR Electric and, separately, WMECO, calculates the revenue increase that is needed to recover the operating income shortfall, along with the associated federal income taxes, Massachusetts income taxes and uncollectible expenses attributable to the increase. In other words, for NSTAR Electric or WMECO to earn $1.00 of operating income, the Department must allow $1.6842 and $1.6933 to be recovered through rates by NSTAR Electric and WMECO, respectively, in order to account for the federal income taxes, Massachusetts state income taxes and uncollectible expense that Eversource will incur in relation to each $1.00 of operating income. Multiplying the Revenue Requirement Factor by the operating income shortfall listed on Line 28 of Exhibit ES-DPH-2 (East), Schedule DPH-2 yields the total revenue deficiency of $60,194,386 for NSTAR Electric, while the WMECO total revenue deficiency of $35,663,046 is shown on Line 30 of Exhibit ES-DPH-2 (West), Schedule DPH-2.

Q. The Company's filing encompasses other rate-related proposals. Do these proposals affect the computation of the revenue requirement?

A. No, these proposals do not affect the revenue requirement computation. Specifically, in this proceeding, NSTAR Electric is proposing to implement a revenue-decoupling mechanism ("RDM") consistent with the Department's directives in Rate Structures to Promote the Efficient Deployment of Demand Resources, D.P.U. 07-50-A (2008). WMECO has already implemented an RDM pursuant to the Department's order in D.P.U. 10-70. The RDM does not affect the computation of the revenue requirement or revenue deficiency in this case. The Company's proposed RDM and the future impact on customer rates is discussed in the testimony presented by the Rate Design Panel.

Eversource is also proposing to implement a performance-based ratemaking mechanism ("PBRM") that would set rates annually in accordance with a revenue-cap formula to be approved by the Department in this case. The PBRM would substitute for a capital cost recovery mechanism, with the goal of improving cost-control incentives, administrative efficiency and effectiveness in promoting the Commonwealth's clean-energy goals. As a "stretch factor" within the PBRM, Eversource is proposing a Grid Modernization Base Commitment ("GMBC") of $400 million in incremental investment over the next five years, without a new or separate cost recovery mechanism.

With the Department's approval of the PBRM, Eversource would initiate the GMBC as of January 1, 2018, to enable technologies that would further the objectives of the Commonwealth's energy and environmental policies. As a "stretch factor" within the PBRM, Eversource will have strong incentives to control the costs of its GMBC investments, as well as the costs of its traditional investments and operating and maintenance ("O&M") expenses. The PBRM does not affect the computation of either the NSTAR Electric or WMECO revenue requirements or revenue deficiencies in this proceeding. The Company's PBRM is described in Exhibit ES-GWPP-1 and the Company's GMBC proposal is described in Exhibit ES-GMBC-1. In addition, the testimony of Company Witness Mark E. Meitzen, Ph.D presents the economic analysis of electric industry cost trends to establish the revenue-cap formula that would apply in the PBRM.

Q. Is the Company proposing changes to existing reconciling mechanisms as part of this case?

A. Yes, on a limited basis. The testimony presented by the Rate Design Panel describes the various proposals related to rate consolidation and rate design presented for the Department's review in this proceeding. Consistent with these proposals, the Company is proposing adjustments to some, but not all, of the existing reconciling mechanisms in place for NSTAR Electric and WMECO, as itemized in Exhibit ES-DPH-5 (East) and Exhibit ES-DPH-5 (West) for NSTAR

Electric and WMECO, respectively. These proposals are described in more detail in Section VI, below. These adjustments do not affect the distribution revenue requirement presented in this case in Exhibit ES-DPH-2 (East) and Exhibit ES-DPH-2 (West) for NSTAR Electric and WMECO, respectively.

Q. Do the separate NSTAR Electric and WMECO costs of service include costs incurred by a centralized service company on behalf of NSTAR Electric and WMECO?

A. Yes. In the test year, service company charges were billed to NSTAR Electric and WMECO, separately, by ESC.

Q. **Please explain the service company structure during the test year.**

A. Beginning with the effective date of the merger of Northeast Utilities and NSTAR, April 10, 2012 and through December 31, 2013, Northeast Utilities Service Company ("NUSCO") and NSTAR Electric & Gas service company ("NE&G") operated as a single service company organization despite being separate legal entities. Effective January 1, 2014, NE&G was legally merged into NUSCO, with NUSCO as the surviving entity. Effective February 2, 2015, Northeast Utilities and all of its subsidiaries began doing business as Eversource Energy, and NUSCO was renamed as ESC.

ESC provides administrative, corporate and management services to NSTAR Electric and WMECO and other operating subsidiaries of Eversource Energy.

The cost of service for NSTAR Electric and WMECO reflects charges from ESC in the test year ending June 30, 2016. Service-company charges are comprised of "direct charges" billed for costs incurred and work performed by service-company personnel directly related to the respective subsidiary, and "common costs," which are allocated among the respective subsidiaries receiving the service based on appropriate allocation factors.

Q. How are ESC costs incorporated into the NSTAR Electric and WMECO revenue requirement calculations?

A. ESC charges to NSTAR Electric are recorded on the NSTAR Electric books and then incorporated into the appropriate expense categories used in the test year and rate-year cost of service. The same process is followed, separately, for WMECO.

Q. Are charges billed to NSTAR Electric and WMECO in conformance with a service agreement?

A. Yes. During the test year period, there were operating agreements in effect between ESC and NSTAR Electric and WMECO, respectively. These agreements identify the services that are provided to NSTAR Electric and WMECO and reference the billing methods that are applied to calculate the charges presented each month to NSTAR Electric and WMECO.

Q. Is there any other analysis that you have relied on to prepare the NSTAR Electric and WMECO revenue requirements?

A. Yes. To compute the NSTAR Electric and WMECO revenue requirements, I have used the recommended cost of capital presented by Company Witness Robert B. Hevert. The cost of capital is based on the Company's actual capital structure as of June 30, 2016.

Employee payroll adjustments are discussed in the testimony of Company Witness Sasha Lazor, and employee benefits are discussed in the testimony of Company Witness, Michael P. Synan.

Lastly, the NSTAR Electric and WMECO revenue requirements include depreciation expense derived from the depreciation studies prepared by Company Witness John J. Spanos.

IV. REVENUE REQUIREMENT ANALYSIS

Q. What adjustments have you made to the NSTAR Electric and WMECO revenue requirement calculations?

A. The separate NSTAR Electric and WMECO revenue requirements include adjustments to Operating Revenues, O&M Expense, Depreciation, Amortization, Taxes and Rate Base. I describe these adjustments in detail below.

Q. Is Exhibit ES-DPH-2 (East), Schedule DPH-6 and Exhibit ES-DPH-2 (West), Schedule DPH-6, which illustrates the post-test year adjustments to O&M expense, organized in the same manner for both NSTAR Electric and WMECO, respectively?

A. Yes. These exhibits are developed in the same manner for the separate NSTAR Electric and WMECO revenue requirement calculations. Exhibit ES-DPH-2 (East), Schedule DPH-6, page 1, and Exhibit ES-DPH-2 (West), Schedule DPH-6, page 1, summarizes the proposed post-test year adjustments to O&M expense and other operating expenses such as depreciation, amortization, and taxes other than income taxes. Column B of Schedule DPH-6, page 1, shows the per-book figures for O&M expense and other operating expenses with normalizing adjustments. Column C of Schedule DPH-6, page 1, itemizes each company's proposed post-test year adjustments to test year books. Column D of Schedule DPH-6, page 1, shows the Rate Year Pro-Forma amount included in the revenue requirement. Column E of Schedule DPH-6 page 1 shows the sum total of the previous columns, including the proposed increase or decrease to revenues and expenses. Supporting exhibits are referenced in the last column.

Exhibit ES-DPH-2 (East), Schedule 6, page 2 and Exhibit ES-DPH-2 (West), Schedule 6, page 2, provide a schedule of expenses, starting with the balances as reported on each company's respective FERC Form 1 as of June 30, 2016 in Column C. Column D presents adjustments required in order to remove expenses related to adjustment clauses. Column E presents the reclassification of service company employee benefits, as described in more detail below. Column F presents normalizing adjustments to test year expenses. Other pro forma expense adjustments are presented in the remaining columns. The rate year distribution expense is presented in the last column.

Exhibit ES-DPH-2 (East), Schedule 6, page 3 and Exhibit ES-DPH-2 (West), Schedule 6, page 3, provide details supporting the amounts listed on page 2, column D, and reflect the removal of expenses related to adjustment clauses. These amounts are recovered through other mechanisms and have therefore been removed from the distribution revenue requirements in this proceeding.

Exhibit ES-DPH-2 (East), Schedule 6, page 4 and Exhibit ES-DPH-2 (West), Schedule 6, page 4, provide details supporting the amounts listed on page 2, Column F, and an itemized explanation of each normalizing adjustments to test year expenses included in the revenue requirement. These adjustments are described in more detail below.

Q. What adjustments are you proposing in Schedule DPH-6 to the test year levels of O&M expenses for NSTAR Electric and, separately, for WMECO?

A. In Exhibit ES-DPH-2 (East), Schedule ES-DPH-6, page 2, the per-book test year O&M expense total for NSTAR Electric is $1,856,267,255. A total net decrease of $1,533,670,177 to the test year O&M total results from adjustments to: (1) remove items recovered through other rate mechanisms; (2) adjust test year expenses to exclude non-recurring items; and (3) adjust expenses for known and measurable changes through the mid-point of the rate year, including inflation. Each of the adjustments listed on Exhibit ES-DPH-2 (East), Schedule DPH-6 is discussed in turn below.

In Exhibit ES-DPH-2 (West), Schedule ES-DPH-6, page 2, the per-book test year O&M expense total for WMECO is $269,662,017. A total net decrease of $202,094,300 to the test year O&M total results from adjustments to: (1) remove items recovered through other rate mechanisms; (2) adjust test year expenses to exclude non-recurring items; and (3) adjust expenses for known and measurable changes through the mid-point of the rate year, including inflation. Each of the adjustments listed on Exhibit ES-DPH-2 (West), Schedule DPH-6 is discussed in turn below.

A. <u>Operating Revenues</u>

Q. Which schedules show the adjustments to Operating Revenues for NSTAR Electric?

A. Exhibit ES-DPH-2 (East), Schedule DPH-5, page 1, shows test year revenue per books in Column B; a reclassification in Column C to reflect $244,975 of special contract revenues in other revenues, which were recognized in the test year as distribution revenue; normalizing adjustments to remove non-distribution-related items from the distribution cost of service are shown in Column D; adjusted test year revenues are shown in Column E; and pro forma adjustments to test year revenues are shown in Column F. Total test year pro forma revenues are shown in Column G.

Q. Please describe in more detail how the adjusted test year amount on Exhibit ES-DPH-2 (East), Schedule DPH-5, page 1, column E is derived.

A. Exhibit ES-DPH-2 (East), Schedule DPH-5, page 2, provides additional detail in support of the normalizing adjustments shown on Schedule DPH-5, page 1. As shown on Schedule DPH-5, page 2, the adjustments are required in order to remove revenues associated with various reconciling mechanisms not subject to recovery in base distribution rates.

Q. Please describe in more detail how the pro forma adjustments listed on Exhibit ES-DPH-2 (East), Schedule DPH-5, page 1, column F are derived.

A. The Company has included increases in other revenues of: (1) $673,381 in additional Rent from Electric Property, as detailed further on Exhibit ES-DPH-3 (East), WP-DPH-5, pages 2 and 3; and (2) $1,115,894 in Other Electric Revenues, as detailed further on Exhibit ES-DPH-3, (East), WP-DPH-5, page 1. Changes in the level of customer fees are discussed by the Rate Design Panel in the Tariff testimony.

Q. Please elaborate on the adjustments to Rent from Electric Property.

A. The increase in Rent from Electric Property of $673,381 is detailed on Exhibit ES-DPH-3 (East), WP-DPH-5, pages 2 and 3. As shown therein, there are four underlying adjustments:

- a decrease of $577,328 in RCN Pole Attachment revenues to reflect the fact that pole attachment revenues from RCN decreased as of January 1, 2016 as a result of Verizon entering into a license agreement with RCN, which provided that Verizon would receive a share of the pole attachment revenues. Due to this sharing, Eversource now receives from RCN only half of the pole attachment revenues experienced prior to 2016. Therefore, the test year ending June 30, 2016 included six months of pole attachment revenues at the historically higher level that will not continue. As a result, the Company has adjusted the rate-year revenues to be equal to the going-forward amount of $1,824,336, a reduction in revenues of ($577,328) as compared to the test year level;

- a reduction in rent revenues from NSTAR Gas of ($61,007) relating to shared facilities owned by NSTAR Electric for service centers in Plymouth, Somerville, and Hyde Park. These facilities are owned by NSTAR Electric, which charges rent to NSTAR Gas for its proportionate use based on the costs to NSTAR Electric. Therefore, this reduction reflects the most up to date costs to be charged to NSTAR Gas.

- an increase in rent revenues from NSTAR Gas of $1,229,292 associated with the New Bedford Service Center. As described in the testimony of Leanne M. Landry, the Company is in the process of relocating the existing electric and gas service center in New Bedford to a new facility at a nearby location. The existing facility is owned by NSTAR Electric, with a portion of the facility occupied by NSTAR Gas as a tenant of NSTAR Electric, paying rent on a cost basis. The new facility is scheduled to have a Certificate of Occupancy by May 30, 2017, at a total cost to NSTAR Electric of $24,000,000. The addition of this facility represents an increase in both revenues, to reflect the additional cost-based rent revenue from NSTAR Gas, and expense to reflect the increased costs associated with the post-test year plant addition for NSTAR Electric. The basis for the pro-forma adjustment in revenues is provided on Exhibit ES-DPH-3 (East), WP DPH-5, page 3. The adjustment to post-test year expenses is described in more detail below. Both the revenues and expenses will be updated during the case to reflect the final, actual revenues and costs once the facility is complete; and

- an increase of $82,424 in Other Rent from Electric Property related to lease revenue received from MembersPlus Credit Union for use of a portion of

NSTAR Electric's Massachusetts Avenue facility and from Herb Chambers Companies for use of NSTAR-owned property near the Somerville Service Center. This adjustment does not represent a change in test year levels, but is rather a normalizing adjustment to recognize these revenues as Other Rent from Electric Property in the Company's revenue requirement, instead of an offset to rent expense, as they were initially recorded for January through June 2016.

Q. Which schedules show the adjustments to Operating Revenues for WMECO?

A. Exhibit ES-DPH-2 (West), Schedule DPH-5, page 1, shows per-book test year revenue in Column B; normalizing adjustments to remove non-distribution related items from the distribution cost of service are shown in Column C; adjusted test year revenues are shown in Column D; and pro forma adjustments to test year revenues are shown in Column E. Total Test year Pro Forma revenues are shown in Column F.

Q. Please describe in more detail how the adjusted test year amount on Exhibit ES-DPH-2 (West), Schedule DPH-5, page 1, column D is derived.

A. Exhibit ES-DPH-2 (West), Schedule DPH-5, page 2, provides additional detail in support of the normalizing adjustments shown on Schedule DPH-5, page 1. As shown on Schedule DPH-5, page 2, the adjustments are required in order to remove revenues associated with various reconciling mechanisms not subject to recovery in base distribution rates.

Q. Please describe in more detail how the pro forma adjustments listed on Exhibit ES-DPH-2 (West), Schedule DPH-5, page 1, column E is derived.

A. The Company has included an increase of $238,893 in Other Electric Revenues, as detailed further on Exhibit ES-DPH-3 (West), WP DPH-5, page 1. Changes in the level of customer fees are discussed by the Rate Design Panel in the Tariff testimony.

B. Adjustments to O&M Expense

Q. What is the amount of per-book test year O&M Expense?

A. In the test year, NSTAR Electric incurred $1,856,267,255 in O&M expense, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-6, Page 2, Column C, at line 84. During the test year, WMECO incurred $269,662,017 in O&M expense, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-6, Page 1, Column C, at line 88.

Q. Has the Company removed non-distribution expenses, such as those associated with the procurement of Basic Service and the provision of energy efficiency programs pursuant to the Green Communities Act?

A. Yes. Non-distribution expenses are removed in Exhibit ES-DPH-2 (East), Schedule DPH-6, Page 2, Column D and Exhibit ES-DPH-2 (West), Schedule DPH-6, Page 2, Column D for NSTAR Electric and WMECO, respectively.

Additional details supporting Column D are provided on Schedule DPH-6, page 3. As shown on page 3, the Company has removed non-base distribution expenses recovered through other rate mechanisms established by the Department, including transmission, transition, basic service, NSTAR Green, energy efficiency charges, pension and PBOPs, lost base revenue and credits associated with net metering facilities installed by customers, and long-term renewable contracts.

Q. Please describe the benefits reclassification included in Exhibit ES-DPH-2 (East), Schedule DPH-6, page 2, Column E and Exhibit ES-DPH-2 (West), Schedule DPH-6, page 2, Column E for NSTAR Electric and WMECO, respectively.

A. As described in more detail below, the Company has calculated the rate-year benefits expense for both operating company and ESC employees for specific healthcare and 401K benefits. Operating company employee benefits costs are charged to FERC Account 926. However, ESC employee benefits are a component of the general ESC overhead rate ("GSCOH"), which "follows" ESC employee labor to the account in which the labor is charged. Therefore, in order to more simply present the benefits adjustment associated with ESC employee expenses, I have calculated the portion of the GSCOH expense that relates to benefits and reclassified those amounts into Account 926 for presentation purposes for both NSTAR Electric and WMECO.

Q. Did you make any other adjustments to the test year level of expenses for either the NSTAR Electric cost of service or the WMECO cost of service?

A. Yes. In order to remove out-of-period or non-recurring items from the test year level of expense activity the Company undertook a detailed review of account activity to normalize out-of-period or non-recurring activity. As a supplement to this review, the Company's Accounting Department identified any accounting entries that were recorded on the books of NSTAR Electric and WMECO that were "out-of-period," meaning the entries were booked during the test year but are related to a different time period. In addition, the Company's Accounting Department identified entries that were recorded outside of the 12-month test year but that should have been recorded within the test year. The result of this analysis and review is summarized in the normalizing adjustments schedule provided as Exhibit ES-DPH-2 (East), Schedule DPH-6, page 4, and Exhibit ES-DPH-2 (West), Schedule DPH-6, page 4.

Q. Please describe the normalizing adjustments included in Exhibit ES-DPH-2 (East), Schedule DPH-6, page 4 for NSTAR Electric.

A. The normalizing adjustments relating to O&M are presented on Exhibit ES-DPH-2 (East), Schedule DPH-6, page 4, result in an increase to test year expense of $9.1 million. This increase is mostly caused by one item, which is an increase in expense of $10.5 million in Account 904 (Exhibit ES-DPH-2 (East), Schedule DPH-6, page 4, line 46).

This adjustment reflects the reversal of a credit booked in the test year at the time of the Department's decision in the NSTAR Gas rate case in D.P.U. 14-150, relating to the allowed recovery of hardship arrearage balances. In that case, and in cases before and since that decision, the Department found that it was appropriate to allow companies to recover the amount of hardship protected account balances outstanding over 360 days. This decision for NSTAR Gas was applied to NSTAR Electric and resulted in accounting entries during the test year that had a net effect of crediting Account 904 for $10.5 million.

This credit was the result of applying the Department's decision in the NSTAR Gas rate case to NSTAR Electric; is non-recurring; and is therefore appropriate to eliminate from test year activity through a reversal. This results in an increase to test year expenses in Account 904 of $10.5 million.

Excluding that reversal, the remainder of the normalizing O&M adjustments reflected on Exhibit ES-DPH-2 (East), Schedule DPH-6, page 4, result in a decrease in test year O&M expenses of ($1,386,835). Each adjustment is itemized on Schedule DPH-6, as follows:

- Removal of out-of-period accrued payroll adjustments from various accounts totaling ($843,019). This adjustment is necessary because a payroll accrual was not booked in error during the month prior to the start of the test year, which resulted in additional payroll expenses being incurred in the test year that are related to the prior period;

- Addition of $35,474 for expenses related to test year activity but booked after the test year end;
- Removal of ($71,439) in miscellaneous billing related to employee pension and PBOP benefits expenses charged to miscellaneous receivables during the test year in order to avoid a double recovery of costs going forward in the Company's Pension Adjustment Mechanism ("PAM");
- Addition of $250,000 related to an out-of-period reversal booked during the test year;
- Removal of ($1.3 million) in storm-restoration vegetation management costs related to Winter Storm Lexi and Winter Storm Mars both of which occurred in February, 2016. These costs were directly related to the storm restoration effort in those events and were reclassified to the respective storm cost accounting work order after the close of the test year period. Therefore the test year level of expense must be reduced by these amounts;

- Removal of ($96,240) relating to customer-service guarantees for late or canceled customer appointments or failure to notify customers of planned outages;

- Removal of ($1,142,497) related to variable compensation to normalize the test year level. This adjustment was required in order to properly incorporate accounting entries which 'true-up' calendar year activity to actual amounts versus estimated amounts. These entries occurred during the test year but are related to the calendar year. Therefore, an adjustment is required so that only the portion of the adjustment related to test year activity remains;

- Removal of executive administrative expenses of ($158,101) from Account 920 and ($107,088) from Account 930. Although these expenses represent valid and necessary business expenses, the Company has opted to remove these costs from the cost of service presented for review as part of this rate case;

- Reclassification of $51,373 in legal and consulting costs to Account 923 originally booked to Account 408. These expenses were incurred as part of the Company's pursuit of property tax abatements relating to the new valuation methodology being utilized by certain municipalities in the

Company's service territory. The Company is reclassifying these expenses to Account 923 for presentation in the revenue requirement;

- Removal of ($299,402) in shareholder services costs from the distribution cost of service;
- Increase to account 923 for an additional $401,577 reflecting the elimination of various out-of-period, non-recurring legal and consulting credits to expense;
- Addition of $158,407 in non-recurring distribution of insurance policy surplus received in the test year;
- Addition of $585,070 related to an out-of-period medical true-up that relates to the first six months of 2015 (prior to the test year);
- Addition of $1,342,409 related to regulatory assessment expenses due to a credit booked in the test year for the same amount related to the unwinding of an account payable recorded in prior periods;
- Removal of ($162,168) in storm-assessment costs incurred in the test year that is not recoverable in rates, per statute.
- Removal of ($114,035) in lease expense related to Transmission and other lines of business plus reclassification of $72,709, which was recorded as a

credit to expense in the test year and is being reflected as other revenue in the revenue requirement.

Q. Please describe the normalizing adjustments included in Exhibit ES-DPH-2 (West), Schedule DPH-6, page 4, for WMECO.

A. Many of the same adjustments described above for NSTAR Electric were necessary for WMECO as well. The normalizing adjustments relating to O&M reflected on Exhibit ES-DPH-2 (West), Schedule DPH-6, page 4, result in a decrease in test year O&M expenses of ($780,816). Each adjustment is itemized on Schedule DPH-6, as follows:

- Reclassification of $560,000 related to the continued amortization of hardship uncollectible expenses as approved in D.P.U. 10-70. For a portion of the test year this amount was booked to Account 904 and has been reclassified from that account to Account 407;

- Removal of out-of-period accrued payroll adjustments from various accounts totaling ($140,525). This adjustment is necessary because a payroll accrual was not booked in error during the month prior to the start of the test year, which resulted in additional payroll expenses being incurred in the test year that related to the prior period;

- Removal of ($29,665) in miscellaneous billing related to employee pension and PBOP benefits expenses charged to miscellaneous receivables during the test year in order to avoid a double recovery of costs going forward in the Company's PAM;

- Addition of $224,305 related to credits booked to expense in the test year for charges related to the July 2, 2014 Wind Storm and the November 26, 2014 Thanksgiving Storm. These charges reduced the amount of expense in the test year but were credits related to activity in the Company's storm reserve account. Therefore, these credits have been reversed;

- Removal of ($124,382) related to variable compensation to normalize the test year level. This adjustment was required in order to properly incorporate accounting entries which 'true-up' calendar year activity to actual amounts versus estimated amounts. These entries occurred during the test year but related to the calendar year. Therefore, an adjustment is required so that only the portion of the adjustment related to test year activity remains;

- Removal of executive administrative expenses of ($28,163) from Account 920 and ($17,387) from Account 930. Although these expenses represent valid and necessary business expenses, the Company has opted to remove these costs from the cost of service presented for review as part of this case;

- Reclassification of $214,829 in legal and consulting costs to Account 923 originally booked to Account 408. These expenses were incurred as part of the Company's pursuit of property tax abatements relating to the new valuation methodology being utilized by certain municipalities in the Company's service territory. The Company is reclassifying these expenses to Account 923 for presentation in the revenue requirement;
- Removal of ($33,215) in shareholder services costs from the distribution cost of service;
- Removal of ($12,014) of other activity in Account 923 reflecting the elimination of various out-of-period, non-recurring legal and consulting credits to expense;
- Addition of $22,675 in non-recurring distribution of insurance policy surplus received in the test year;
- Addition of $98,649 relating to a reserve reversal booked during the test year regarding out-of-period insurance at the Millstone and Seabrook Nuclear Power Plants.

- Addition of $46,892 related to an out-of-period medical true-up that relates to the first six months of 2015 (prior to the test year);
- Removal of ($27,744) in storm-assessment costs incurred in the test year that are not recoverable in rates, per statute;
- Removal of ($399,000) in non-recurring union arbitration costs;
- Removal of ($15,891) in lease expense related to Transmission and other lines of business.

Q. Has the Company made an adjustment to the revenue requirement for advertising expense?

A. No. As required by Department precedent, the Company, separately for NSTAR Electric and WMECO, reviewed its advertising activity in the test year in order to categorize its test year advertising expenses into four groupings designated by the Department. The result of this review confirmed that the Company's test year advertising activity was informational in nature, and therefore that no adjustment was required to test year distribution expenses in order to remove costs not recoverable in rates under Department precedent, such as certain types of image and promotional activities.

Exhibit ES-DPH-4, Schedule DPH-5 (East), presents copies of NSTAR Electric's print advertisement activity for the test year with the exception of promotional materials related to its energy efficiency programs, while Exhibit ES-DPH-4, Schedule DPH-5 (West) presents the same information for WMECO. All costs related to energy efficiency programs are recorded within specific expense accounts and recovered separately from customers. Therefore, I have not included copies of those print advertisements within these schedules.

During the test year, the Company incurred a total advertising expense amount of approximately $100,000 for NSTAR Electric and $50,000 for WMECO. As shown by the print advertisement copy provided in the referenced exhibit the messaging on this material is informational in nature. Therefore, the Company has made no adjustment to the test year levels of advertising expense.

C. Post-Test Year Expense Adjustments

1. Postage Expense

Q. Did you adjust the test year Postage Expense for ratemaking purposes for NSTAR Electric and separately for WMECO?

A. Yes. A decrease in the cost of first class postage of 3.84 percent took effect on April 10, 2016. On April 1, 2016, the United States Postal Service ("USPS") announced that effective April 10, 2016 postal rates would be decreasing as a result of the lifting of the exigent surcharge originally granted to the USPS by the

Postal Regulatory Commission in January 2014.[1] The Company has included a post-test year adjustment to reflect this decrease. Specifically, the Company has reduced its postage expenses incurred from the start of the test year, or July 1, 2015, through March 31, 2016 by 3.84 percent. The result is a reduction of postage expense of ($126,159) for NSTAR Electric and ($27,580) for WMECO, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-7, and on Exhibit ES-DPH-2 (West), Schedule DPH-7, respectively.

2. UNCOLLECTIBLE ACCOUNTS

Q. Did you adjust the test year Uncollectible Expense for ratemaking purposes for NSTAR Electric and separately for WMECO?

A. Yes. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-8, bad-debt expense for NSTAR Electric is computed in accordance with the Department's practices and the method used and approved for NSTAR Gas in D.P.U. 14-150 (2015). Specifically, I totaled non-basic service retail revenues and net write-offs for each of the past three years, including the test year, i.e., July 2013 through June 2014; July 2014 through June 2015; and July 2015 through June 2016, as shown in Exhibit ES-DPH-3 (East), WP-DPH-8, Page 2. Net write-offs are comprised of the actual customer accounts written off for non-payment minus recoveries related to previously written off account balances. The resulting ratio of actual customer

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[1] http://blog.stamps.com/2016/04/01/usps-announces-postage-rate-decrease-starts-april-10-2016/. The Company's postage adjustment is based on the decrease in the First Class Letter - 5 Digit Presort Automation rate.

account write-offs to retail revenues is 0.7084 percent and is noted in Exhibit ES-DPH-3 (East), WP DPH-8, Page 1. This net write-off ratio is intended to represent the portion of the Company's non-basic service billed revenues that it will ultimately be unable to collect from its customers.

The starting point for the NSTAR Electric analysis was the adjusted test year balance for Account 904 (Uncollectible Accounts) in the amount of $15,073,652, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-8, Page 2, Line 39. This reflects gross bad-debt expense booked on an accrual basis during the test year related to retail revenues, less amounts removed for reconciling mechanisms (basic service and arrearage management program). The test year level of bad-debt expense computed using the Department's three-year normalizing convention is $11,499,968 for NSTAR Electric, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-8, Page 2, Line 27. The difference between this amount and the adjusted test year total results in a pro-forma decrease of ($3,573,684) in bad-debt expense, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-8, Page 2, Line 30.

WMECO's bad-debt expense is calculated in the same manner. The resulting ratio of WMECO's actual customer account write-offs to retail revenues is 1.2435 percent and is noted in Exhibit ES-DPH-2 (West), WP DPH-8, Page 1. The adjusted test year balance for Account 904 (Uncollectible Accounts) is

$5,163,634 as shown on Exhibit ES-DPH-2 (West), Schedule DPH-8, Page 2, Line 39. The test year level of bad-debt expense computed for WMECO using the Department's three-year normalizing convention is $3,100,435, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-8, Page 2, Line 27. The difference between this amount and the adjusted test year total results in a pro-forma decrease of ($2,063,199) in bad-debt expense, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-8, Page 2, Line 30.

3. Fee Free Payment Processing

Q. Have you included an adjustment to incorporate costs associated with fee free payment processing for customers of NSTAR Electric and WMECO?

A. Yes. Today, customers who opt to pay their bills with a credit or debit card are required to pay the associated cost of $2.25 per transaction directly to the third party payment processing agent. This is described in detail by Company Witness Penelope M. Conner, who also discusses the fact that customers are dissatisfied when required to pay a "convenience" fee for credit and debit card payments. To align the Company's service offerings with customer experience in the marketplace and improve customer satisfaction, the Company is proposing to implement a "fee free" credit/debit card payment option. To provide these transactions on a least-cost basis, the Company conducted a competitive solicitation process in advance of this rate case and negotiated a contract with the winning bidder, subject to the Department's review and acceptance of the

Company's associated ratemaking proposal in this proceeding. The RFP process and resulting negotiations are described in detail in the testimony of Ms. Conner, Exhibit ES-PMC-1. Accordingly, I have incorporated an adjustment to reflect the cost of the credit/debit card processing fees in the distribution revenue requirement, rather than continuing to offer this payment option at a fee to customers.

Q. Please describe the basis of the adjustment for the fee free payment.

A. The Company cannot offer or conduct credit/debit payment transactions without a third-party vendor to handle the actual transaction. Therefore, the Company conducted a RFP process designed to obtain the least-cost transaction fee for credit/debit card transactions to be handled by a third-party vendor over a five-year period. In this proceeding, the Company is presenting the results of this RFP, which produced a proposed agreement between ESC and SpeedPay Inc. ("SPI"), a subsidiary of Western Union, and requesting that the Department allow recovery of the cost of this agreement through distribution rates. The agreement is presented with the testimony of Ms. Conner as Exhibit ES-PMC-2 ("Amendment No. 1 to the Speedpay Master Services Agreement") (the "SpeedPay Agreement").

Under the Speedpay Agreement, SPI would provide the services necessary to offer credit/debit card transactions to NSTAR Electric and WMECO customers on a "fee free" basis. The cost of the service will be charged to the Company, and the Company proposes to recover this cost from all customers through distribution rates. In the test year, customers opting for payment by credit/debit card paid a transaction fee of $3.95, which was reduced in September 2016 to $2.25 per transaction. With the Department's approval of the "fee free" proposal, this transaction fee for individual customers would be eliminated and the service would be available to all residential NSTAR Electric and WMECO customers on a "fee free" basis. The cost for the Company would be a per transaction amount subject to change over the term of the agreement, depending upon specified parameters relating to the dollar value and number of transactions completed.

Based on reasonable assumptions regarding customer migration to the "fee free" credit/debit payment option, the total cost over the next five years is estimated to be approximately $30 million, or approximately $6 million per year. The Company is proposing to include this annual amount in the revenue requirement. However, the amount actually paid to SPI by the Company will vary from year to year, with the actual amount paid by the Company remaining a function of actual customer migration and the value of the credit/debit transactions. The estimated annual cost of $6 million is shown in Exhibit ES-DPH-2 (East), Schedule DPH-9 for NSTAR Electric and Exhibit ES-DPH-2 (West), Schedule DPH-9 for WMECO. For revenue requirement purposes, the total annual cost is split between NSTAR Electric and WMECO based on the number of customers, or approximately 85 percent to NSTAR Electric and 15 percent to WMECO, as shown on the same schedule.

Q. What is the Company's ratemaking proposal relating to the fee free payment processing adjustment?

A. The testimony of Ms. Conner discusses the Company's expectations regarding customer participation in the "fee free" credit/debit card payment option. Due to the significant potential for the rate of credit and debit card payment to increase exponentially with the elimination of the "convenience" fee that the Company is charging to customers who elect to use the credit/debit card payment option, the Company is proposing a transitional ratemaking treatment allowing for the adjustment of the annual amount included in rates in this case based on actual experience, whether positive or negative. Specifically, the Company is proposing to establish a reserve that would be funded through the annual contribution collected through rates ($6 million in total annually).

Annually, the actual amounts paid by the Company to SPI under the contract would be charged against the reserve fund, so that the balance of the fund represents the difference (plus or minus) between the amount collected in base rates and the amounts actually paid to SPI over the contract term. At the time of the Company's next base-rate proceeding, any over- or under-collection would be amortized into rates. Eventually, the annual cost of the "fee free" credit/debit card payment option should become more susceptible for routine incorporation into rates as a representative annual expense. However, the migration trend is expected to be so steep over the first five years of the transition, that a different ratemaking approach is necessary to enable the transition.

To determine the total value of $30 million over five years, the Company multiplied the anticipated number of transactions over that period by year and by the expected cost per transaction, both of which were derived from information provided in response to the Company's RFP. This resulted in a total cost of approximately $30 million over the five-year term. As such, the Company is proposing to recover $6 million per year, attributed 85 percent to NSTAR Electric and 15 percent to WMECO, as shown in Exhibit ES-DPH-2 (East), Schedule DPH-9). This proposal is designed to provide customers with the full benefit of the lowest cost per transaction, while also providing appropriate ratemaking treatment for transitioning these costs into base rates in the future, once they reach a more steady state and representative level.

4. DUES AND MEMBERSHIPS

Q. What adjustment has the Company made for dues and memberships?

A. The post-test year adjustment for NSTAR Electric, presented on Exhibit ES-DPH-2 (East), Schedule DPH-10, shows an adjustment to decrease test year expense of

$784,558 by ($93,080). The deduction primarily represents the removal of any charges for dues and memberships unrelated to electric distribution service in Massachusetts. Similarly, for WMECO, Exhibit ES-DPH-2 (West), Schedule DPH-10, shows an adjustment to decrease test year expense of $124,820 by ($2,693).

5. EMPLOYEE BENEFIT COSTS

Q. What adjustment has the Company made for employee benefit expense?

A. For NSTAR Electric, the post-test year adjustment made on Exhibit ES-DPH-2 (East), Schedule DPH-11 is an increase of $1,548,219. The employee benefit offerings for NSTAR Electric employees, WMECO employees, and ESC employees serving NSTAR Electric and WMECO are discussed in the testimony of Company Witness Michael Synan. Exhibit ES-DPH-2 (East), at Schedule DPH-11, summarizes the pro-forma adjustments related to employee-benefit expense. Although the benefits-related expense adjustment represents an increase over test year levels, the total level of employee-benefit expense is much lower than it otherwise would be due to merger-related integration efforts that reduced the base level of employee-benefit expense. These integration-related efforts are discussed by Mr. Synan in his testimony.

For WMECO, the post-test year adjustment made on Exhibit ES-DPH-2 (West), Schedule DPH-11 is an increase of $206,047.

Q. Previously you described the benefits reclassification included in Exhibit ES-DPH-2 (East), Schedule DPH-6, page 2, Column E for NSTAR Electric and the corresponding schedule for WMECO. Could you please elaborate on why that reclassification is necessary?

A. The Company's employee-benefit expense adjustment adjusts test year levels of (i) medical and prescription expenses; (ii) vision expenses; (iii) dental expenses; and (iv) 401K costs. As described below, the basis of the adjustments to healthcare expense is a detailed analysis of the number of employees of both the operating company and the service company subscribing to each various benefit plan and the associated costs of each option. When ESC employees provide services to an operating company, their labor is charged to that operating company, along with associated overhead costs included in the GSCOH, which includes benefits. Because ESC labor and the associated benefits are charged to various FERC accounts, it was necessary for me to identify the portion of the GSCOH charges that relates to benefits expenses, in order to avoid overstating the amount of benefits appropriate for inclusion in the distribution cost of service. Therefore, in order to more simply present the employee benefits adjustment for ESC labor, I have calculated the portion of the GSCOH related to benefits and reclassified those amounts into Account 926 for presentation purposes for both NSTAR Electric and WMECO.

As shown on Exhibit ES-DPH-2, Schedule DPH-6, page 2, Column E, there is no net impact to the cost of service of making this reclassification, as it is merely a geography change from various expense accounts to Account 926.

Q. Please describe how you determined the adjustment for employee-benefit expense.

A. For both NSTAR Electric and WMECO, there are four categories of adjustments associated with employee benefits: (1) medical/prescription, vision, and dental expense; (2) the 401K Savings Plan; (3) the Basic Service reclassification; and (4) Pension/PBOP reclassification. These four categories are discussed with additional detail as follows:

<u>Medical, Dental and Vision</u> – Eversource Energy is self-insured for its healthcare benefits for active employees. Therefore, in order to determine the amount of the rate-year healthcare benefit expense to include in the revenue requirement, it was necessary to apply an appropriate benefit-expense rate per employee for both NSTAR Electric and WMECO to a representative number of employees for each of the operating companies, as well as to ESC employees. In order to complete that analysis, I obtained the 2016 medical, dental and vision "working rates" from the Eversource Human Resources Department. The working rates are provided to the Company by its external benefits consultants and represent, for NSTAR Electric and, separately, WMECO, the per employee expected claims levels for the following year. The working rates are utilized to determine the amount of contributions required by employees. I applied the per employee rates to the actual staffing levels and benefits plan participation at NSTAR Electric and, separately, WMECO, as of June 30, 2016.

The analysis presented on Exhibit ES-DPH-2 (East), Schedule DPH-11, page 3, provides the computation for NSTAR Electric. This analysis supports the rate year level of medical expense of $15,858,815; vision expense of $95,496; and dental expense of $1,007,488. Similarly, this analysis is presented on Exhibit ES-DPH-2 (West), Schedule DPH-11, page 3, for WMECO supporting the rate year level of medical expense of $2,803,072; vision expense of $15,018; and dental expense of 154,480. The Company has relied upon the 2016 working rates to develop the revenue requirement in this proceeding. The Company expects the 2017 working rates to become available during the course of this proceeding and intends to update the revenue requirement to incorporate those updated costs.

401K Savings Plan – The Company's 401K Savings Plan expense represents the company-match contributions to a defined contribution retirement plan. In order to determine the expense amount for the rate year for NSTAR Electric, I multiplied the test year expense amount of $4,268,022, shown in Exhibit ES-DPH-2 (East), Schedule DPH-11, Page 2, Line 22, Column K, by the Payroll Percentage Adjustment of 8.396 percent on Exhibit ES-DPH-2 (East), Schedule

DPH-13, page 2. This is based on the assumption that the increase in savings plan contributions will be consistent with the overall increase in salaries and wages. I performed the same calculation for WMECO and multiplied the test year expense amount of $334,782, shown in Exhibit ES-DPH-2 (West), Schedule DPH-11, Page 2, Line 22, Column K, by the Payroll Percentage Adjustment of 7.313 percent on Exhibit ES-DPH-2 (West), Schedule 13, page 2.

Basic Service Adder Benefits – As described in Section VI below related to other revenue transfers, the Company has included a representative amount of basic service administrative costs in the basic service adder. This results in a reduction to NSTAR Electric's benefits included in the distribution revenue requirement of $169,393, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-11, page 2 and $78,387 for WMECO as shown on Exhibit ES-DPH-2 (West), Schedule DPH-11, page 2.

Pension/PBOP and PBOP – Since the inception of the PAM for NSTAR Electric, a portion of the annual distribution related pension and PBOP O&M expense has been recovered through NSTAR Electric's base rates. However, as described in Section VI below related to other revenue transfers, the Company has excluded pension and PBOP costs from its distribution revenue requirement. Therefore, going forward for both NSTAR Electric and WMECO there will no longer be a credit in the PAM to reflect amounts recovered in base distribution rates. The exclusion of pension and PBOP costs from base distribution rates is shown on Exhibit ES-DPH-2 (East), Schedule DPH-11, page 2, line 26, for NSTAR Electric and the same schedule in Exhibit ES-DPH-2 (West) for WMECO.

6. INSURANCE EXPENSE AND INJURIES & DAMAGES

Q. What adjustment have you made for Insurance Expense and Injuries & Damages deductibles?

A. The post test year adjustment made on Exhibit ES-DPH-2 (East), Schedule DPH-12, shows a decrease of ($87,075) for NSTAR Electric, while Exhibit ES-DPH-2 (West), Schedule DPH-12, shows a decrease of ($110,172) for WMECO. The decrease for NSTAR Electric is detailed in Exhibit ES-DPH-2 (East), Schedule DPH-12, pages 2 and 3, while WMECO's decrease is set out in Exhibit ES-DPH-2 (West), Schedule DPH-12, pages 2 and 3. These decreases in expense are the combined effect of: (1) a decrease in corporate property and liability insurance premiums; and (2) the difference between the five-year average of self-insured claims paid and the actuarially determined expense booked during the test year.

Q. Please describe the NSTAR Electric and WMECO corporate insurance for property and liability coverage.

A. Property and liability coverage includes a number of categories of insurance that provide protection from property loss, general liability and other damages that NSTAR Electric and WMECO may incur in the conduct of their business. ESC manages the corporate insurance program through which NSTAR Electric and WMECO separately secure insurance coverage. The corporate insurance program includes both premium-based and self-insured coverage in order to obtain the most cost-effective loss protection.

Q. How does ESC manage its liability insurance costs?

A. All insurance programs and policies are evaluated annually with the aid of insurance brokers in order to secure the best available coverage at the best available rate. In order to balance the risk mitigation that insurance provides and the level of premium costs, an appropriate level of self-insurance deductible is negotiated with insurance carriers. Higher deductible levels result in lower insurance premiums while also resulting in a higher retention of risk of loss. It is the balance between the two that the Company must manage.

Eversource Energy utilizes a well-accepted process when procuring insurance programs. In order to achieve the optimal coverage at the best cost, the Company utilizes its brokers to facilitate this process. The broker compiles the market submission and works with various insurance markets to solicit quotes for insuring the Eversource program.

The Company has service agreements with two main insurance brokers ensuring a competitive process. The broker Eversource uses for property is Aon and for excess liability is Marsh.

Approximately three to four months prior to the renewal date of the program, Eversource's Insurance team holds a strategy meeting with the broker in order to discuss the current coverage in place, opportunities for improvement in coverage and upcoming renewal requirements, and strategies for presenting the Company's risk mitigation requirements to the market in order to optimize the coverage Eversource have in place.

Eversource participates in various industry groups to stay abreast of insurance issues and trends including working groups within Edison Electric Institute and American Gas Association. The Company's Insurance group also maintains knowledge of key company initiatives that lower the Company's risk profile, helping to ensure the underwriting process goes smoothly. In addition to this information, and to the industry trend information provided by the broker, Eversource also utilizes independent sources such as Edison Electric Institute and other insurance surveys to evaluate market trends.

On a combined basis, these processes assist in assuring that the Company's corporate liability costs are as reasonable as possible.

Q. How is the pro forma adjustments related to NSTAR Electric and WMECO's insurance coverage calculated?

A. In order to determine the appropriate level of insurance expense to be included in the revenue requirement, I obtained the most recent insurance policies entered into by ESC. I was then provided the portions of the premium of each policy that applied to NSTAR Electric and WMECO. The resulting premiums form the basis of the insurance expense included in the separate revenue requirements of NSTAR Electric and WMECO. The prepayment of these costs is recorded and amortized over the appropriate fiscal period.

Exhibit ES-DPH-3 (East), WP DPH-12 provides cost detail on these expenses for NSTAR Electric, while the cost detail for WMECO is provide in Exhibit ES-DPH-3 (West), WP DPH-12. This analysis resulted in a decrease of ($275,665) to the test year actual expense amount on NSTAR Electric's books, as reflected in Exhibit-ES-DPH-2 (East), Schedule DPH-12, page 2, sum of line 23, 31, and 38. For WMECO, the analysis resulted in a decrease of ($23,010) to the test year actual expense amount on its books, as reflected in Exhibit-ES-DPH-2 (West), Schedule DPH-12, page 2, sum of line 22, 31, and 38. Based on the coverage periods, the actual premium amounts for certain policies will be known and measurable by the time the record closes in this case. The Company plans to update these amounts to the actual cost levels for both NSTAR Electric and WMECO.

Q. How are the pro forma adjustments for injuries and damages calculated for NSTAR Electric and WMECO?

A. On NSTAR Electric's books of account, the expenses related to the self-insured portion of general liability and workers' compensation are recorded based on actuarially determined liability amounts. In order to normalize these expenses, I obtained a listing of the actual claims paid in these categories for each of the years in the five-year period ended June 30, 2016. I then calculated the average annual claims payment amount of that five-year period. This resulted in an increase of $188,590 to the test year actual expense amount on NSTAR Electric's books, as reflected in Exhibit ES-DPH-2 (East), Schedule DPH-12, page 2, line 35.

I performed the same calculation for WMECO, which resulted in a reduction of ($87,163) to the test year actual expense amount on WMECO's books, as reflected in Exhibit ES-DPH-2 (West), Schedule DPH-12, page 2, line 35.

The total reduction in insurance expense and injuries and damages is ($87,075) for NSTAR Electric as shown on Exhibit ES-DPH-2 (East), Schedule DPH-12, and ($110,172) for WMECO as shown on Exhibit ES-DPH-2 (West), Schedule DPH-12.

7. PAYROLL EXPENSE

Q. Have you made post-test year adjustments for payroll expense for NSTAR Electric and WMECO?

A. Yes. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-13, the post-test year adjustment associated with NSTAR Electric's payroll expense is an increase of $10,035,441, while Exhibit DPH-2 (West), Schedule DPH-13 details the post-test year adjustment increase of $1,694,639 for WMECO. These adjustments account for known and measurable compensation increases for union and non-union employees through July 1, 2018 for both NSTAR Electric and WMECO employees. For WMECO, the post-test year adjustment also includes the annualization of union new hires as shown on Exhibit DPH-3 (West), WP DPH-13, page 2. As referenced above in the discussion of the normalization adjustments required for each Company, in the test year WMECO incurred an expense associated with a union arbitration resolution in the amount of $399,000.

The settlement resolved all matters regarding a 2013 arbitration finding that the Company was obligated to maintain a bargaining unit staffing level of 206 represented employees. Therefore, I have removed the union arbitration amount from the revenue requirement as a non-recurring expense. This resulted in a reduction to the test year level of expense of $399,000, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-6, page 4.

As of the end of the test year, the Company had hired additional union employees in accordance with the aforementioned settlement.[2] However, because the employees hired during the test year were not reflected in the cost of service on an annualized basis, I made an adjustment to annualize the costs of labor hires and bargaining unit attrition during the test year in order to reflect the annualized level of labor in the revenue requirement. The net result of bargaining unit hires and attrition in the test year results in an increase to test year level of expense of $173,600, as shown on Exhibit ES-DPH-3 (West), WP-DPH-13, page 2.

Q. How was the payroll O&M expense determined for the NSTAR Electric and WMECO revenue requirements?

A. I first examined the test year payroll amounts to determine whether those amounts would continue to be the same in the rate year, or whether any known and measurable changes would occur. I determined that changes would occur for both union and non-union payrolls at NSTAR Electric and WMECO. Therefore, I made the necessary adjustments to account for these changes.

Q. Why are these adjustments necessary?

A. The adjustments are necessary in order to determine the level of O&M Payroll that NSTAR Electric and WMECO will each experience during the rate year. The

[2] The settlement agreement required that the Company employ a total of 206 union employees by the end of 2016. The Company has included the annualized costs of bargaining hires and attrition occurring during the test year period into the cost of service. Also as a result of the settlement agreement, legal obligations regarding staffing levels will be reduced and eliminated over time.

adjustments apply the actual percentage payroll rate increases for 2016 and expected increases for 2017 and 2018, separately by union and non-union categories, to actual payroll amounts charged to O&M during the respective NSTAR Electric and WMECO test year. The 2017 payroll increase will be granted to non-union employees April 1, 2017, and will be validated during this case. Similarly the 2018 payroll increase is expected to be granted to non-union employees in April, 2018. Union increases are determined based on the schedules contained in the respective bargaining agreement.

Q. What is the basis used to make an adjustment to the payroll-union test year expense?

A. As discussed in the testimony of Company Witness Sasha Lazor, the majority of NSTAR Electric union employees are covered by a single collective bargaining agreement (Local 369), as is the case for WMECO (Local 455). Mr. Lazor describes the impact of future union wages based on existing union agreements and recommends the known and measurable changes that are included in my analysis to compute the payroll-union adjustments for both NSTAR Electric and WMECO.

Q. What process did you use to develop the payroll-union adjustments for NSTAR Electric and WMECO?

A. First, I determined the test year payroll costs charged to NSTAR Electric and WMECO's O&M accounts. These payroll charges include both straight time and overtime costs. These O&M costs are utilized to determine the expected future level of payroll costs for both NSTAR Electric and WMECO. These calculations were completed for each union at NSTAR Electric and WMECO based on the respective contract increases and effective dates. The total union increases included in the NSTAR Electric and WMECO revenue requirements are shown in Exhibit DPH-2 (East), Schedule DPH-13, page 2, for NSTAR Electric and Exhibit DPH-2 (West), Schedule DPH-13, page 2, for WMECO. Specifically. the total union increases for NSTAR Electric are $6,327,455. WMECO's total union increases are $667,536.

It should be noted that the current contract for Local 369 is set to expire as of June 1, 2018. As such, for purposes of calculating the revenue requirement I have included an increase for Local 369 effective June 2, 2018. However, since it is expected that a new collective bargaining agreement will be reached while the record in this case is open, I intend to update this schedule based on the actual agreement reached when it is complete.

Q. What adjustment was made for non-union payroll?

A. The non-union payroll adjustment is $3,707,986 for NSTAR Electric and $1,027,103 for WMECO. ESC employees are predominantly non-union employees and are included in these amounts. These adjustments represent actual wage increases in 2016 and planned increases in 2017 and 2018. The merit increase percentages for 2017 and 2018 are based on the recommendation provided by Mr. Lazor in his testimony. Details on the calculations undertaken to produce these adjustments are provided at Exhibit ES-DPH-2 (East), Schedule DPH-13, page 2, for NSTAR Electric and Exhibit ES-DPH-2 (West), Schedule DPH-13, for WMECO. Additional supporting information is also provided in the corresponding workpapers in Exhibit ES-DPH-3 (East) and Exhibit ES-DPH-3 (West), respectively.

Q. Does your testimony present the requisite documentation for the inclusion of employee compensation and benefit expense, as well as adjustments thereto, for both NSTAR Electric and WMECO?

A. Non-union wage increases took effect for 2016 on April 1, 2016, and will take effect on April 1, 2017 during this case. As a result, those changes are or will be known and measurable during this case and will be confirmed by the Company when the changes occur.

For wage increases planned for 2017 and 2018, the Company has prepared and submitted the testimony of Mr. Sasha Lazor, Director, Compensation for ESC. Mr. Lazor’s testimony discusses both NSTAR Electric and WMECO’s plan for producing the documentation required by the Department to support the Company’s employee benefit and compensation expense levels and post-test year adjustments. I have used the information and documentation provided by Mr.

Lazor to determine whether, and to what extent, adjustments to test year costs for both NSTAR Electric and WMECO are appropriate.

Q. Please summarize the Company's payroll adjustments.

A. For NSTAR Electric, Exhibit DPH-2 (East), Schedule DPH-13 details the payroll adjustments that increase the test year payroll for known and measurable increases that occurred in 2016; that will occur during this case in 2017, and that are planned for 2018. The adjustment increases test year O&M payroll by $10,035,441; including an increase of $6,327,455 for union payroll and $3,707,986 for non-union payroll.

For WMECO, Exhibit DPH-2 (West), Schedule DPH-13 details the payroll adjustments that increase the test year payroll for known and measurable increases that occurred in 2015 and 2016; that will occur during this case in 2017, and that are planned for 2018. The adjustment increases test year O&M payroll by $1,694,639; including an increase of $667,536 for union payroll and $1,027,103 for non-union payroll.

8. VARIABLE COMPENSATION

Q. Have you adjusted the level of expense for variable compensation for either NSTAR Electric or WMECO?

A. Yes. There are three main factors contributing to the lower amount of proposed rate year variable compensation expense as compared the amount of expense recognized in the test year: (1) as described above, I have normalized the test year level of expense to remove out of period and non-recurring items for both NSTAR Electric and WMECO, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-14, Page 2, Column C for NSTAR Electric and the corresponding schedule for WMECO in Exhibit ES-DPH-2 (West); (2) as explained below, in the test year, both NSTAR Electric and WMECO paid out incentive compensation at greater than the target level. I have reduced the revenue requirement to include the amount of variable compensation at target levels; and (3) during the test year there were changes in the executive management team of Eversource Energy. These changes required further reduction to test year levels of variable compensation in order to ensure that the representative amount of variable compensation for the current executive team is reflected in rates. The combination of these two adjustments are shown on Exhibit ES-DPH-2 (East), Schedule DPH-14, Page 2, Column E for NSTAR Electric and the corresponding schedule for WMECO in Exhibit ES-DPH-2 (West).

Q. Please explain the adjustments you have made to variable compensation for both NSTAR Electric and WMECO.

A. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-14, the post-test year adjustment associated with variable-compensation expense is a decrease of ($3,057,252) for NSTAR Electric, while Exhibit ES-DPH-2 (West), Schedule

DPH-14 details the post-test year adjustment decrease of ($714,682) associated with variable-compensation expense for WMECO.

As described in the testimony of Company Witness Sasha Lazor, the Company's incentive compensation plan represents the variable portion of the wages and salaries paid to non-union employees serving NSTAR Electric and WMECO. Incentive compensation is paid to employees in March for performance in the prior year ending December 31st based on NSTAR Electric, WMECO and individual performance criteria and compensation guidelines. Incentive compensation is included in the separate NSTAR Electric and WMECO revenue requirements at the "target" payment amount for the respective incentive compensation plans. In the test year, both NSTAR Electric and WMECO paid out incentive compensation at greater than the target level. In addition, during the test year, there were changes to the officer mix comprising the executive compensation pool, which required further adjustment to the revenue requirement. As such, in order to reflect the appropriate rate year level of variable compensation, the test year level of executive variable compensation has been adjusted to reflect the most updated information for executive compensation.

As a result, for variable compensation for executives, I have adjusted test year levels to: (1) reflect the current configuration of the executive management team; and (2) adjust the test year amounts to target levels by utilizing 2017 "target" payment for the current officer mix. The total target-level distribution-related, variable-compensation expense, after an allocation to transmission of $1,910,974, is $14,302,266 for NSTAR Electric and $2,330,068 for WMECO. For NSTAR Electric, this amount is then escalated to the mid-point of the rate year by multiplying the total by 5.6722 percent (the appropriate payroll escalation amount for NSTAR Electric payroll increases), and adding the resulting $811,256 to the adjusted distribution target amount described above. This results in total target-level rate year variable compensation expense of $15,113,522 for NSTAR Electric and a net reduction to the cost of service of ($3,057,522).

For WMECO, this base level variable compensation amount is then escalated to the mid-point of the rate year by multiplying it by 5.715 percent (the appropriate payroll escalation amount for WMECO payroll increases) and adding the resulting $133,159 to the adjusted distribution target amount described above. This results in total target-level rate year variable compensation expense of $2,463,226 for WMECO and a net reduction to the cost of service of ($714,682).

9. VEGETATION MANAGEMENT ADJUSTMENT

Q. Have you made adjustments for expenses associated with the Company's Vegetation Management program?

A. Yes. As described in the testimony of Company Witness Vera L. Admore-Sakyi, there are two required adjustments associated with vegetation management in this proceeding. The first is applicable to NSTAR Electric and is required in order to annualize the test year level of expenses for cycle-trimming activities. The second adjustment applies to both NSTAR Electric and WMECO, and is the Company's proposal to implement a Vegetation Management Resiliency Pilot Program for both companies starting in 2017, consistent with the Department's approval of a similar program for Unitil in Fitchburg Gas and Electric Light Company d/b/a Unitil, D.P.U. 13-90 (2014), and required by the Department of National Grid in D.P.U. 15-155.

Q. Please describe the first vegetation-management adjustment related to the annualization of test year expense.

A. As described in the testimony of Ms. Admore-Sakyi, the 12-months ending June 30, 2016 did not include a representative level of vegetation-management expense related to cycle trimming activities. This is due to the fact that, for the first six months of the test year (i.e. July 1, 2015 through December 31, 2015), cycle trimming activities were capitalized to plant in service rather than expensed. This is consistent with the Company's capitalization policy for enhanced and significant vegetation-management activities that constitute a system improvement, rather than routine maintenance. After the first cycle is complete, the Company's capitalization policy requires that the cost of trimming activity for all subsequent cycles to be accounted for as expense. Therefore, because 2016 represented the first full calendar year after the initial cycle of enhanced and significant vegetation-management was complete, activities occurring during the test year were a combination of six months of capital work and six months of expense work, but will be solely expense going forward.

Q. What is the increase in expense associated with the annualization of vegetation-management activities?

A. During the test year, the Company incurred expense associated with its annual cycle trim program of $5,283,642. In addition to this level, which is already reflected in the unadjusted test year level of expense, as described above, the Company's representative level going forward will be higher as a result of the fact that the full amount of annual cycle trim activity will be expensed, with no amounts being than capitalized in the future. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-15, page 2, I have included a post-test year adjustment of $5,226,646 to annualize the cost of the Company's annual cycle trim program and incorporate a total rate year level of expense of approximately $10.5 million, as shown on the referenced exhibit.

Ms. Admore-Sakyi undertook a detailed review of activity during 2015 to determine the amount of tree trimming work subject to annualization, as described in her testimony and provided in Exhibit ES-VLA-4. These invoices document that the total cost of vegetation-management work was $9.1 million in 2015. Ms. Admore-Sakyi also reviewed relevant activity during the test year period ending

June 30, 2016 to confirm the level of work completed during the test year. This analysis showed that approximately $12.1 million of trimming occurred at this specification during the test year. In order to determine the appropriate level of expense to incorporate into the revenue requirement, I have included the adjustment of approximately $5.3 million because the Company anticipates that the annual cost going forward will be slightly less than the actual test year level (recorded to expense and capital) of $12.1 million. Therefore, I have included in the cost of service for NSTAR Electric a total expense of approximately $10.5 million based on the estimated amount of expense that will be incurred in calendar year 2016. The Company will update the record with invoices establishing the actual expense incurred in calendar year 2016 during the course of this proceeding, in order to support the amount to be included in rates.

Q. Please describe the second vegetation management adjustment related to the Vegetation Management Resiliency Tree Work Pilot Program.

A. The specific activities included in the Company's proposed Vegetation Management Resiliency Tree Work ("RTW") Pilot Program are described in the testimony of Ms. Admore-Sakyi. As described therein, the Company is proposing to implement a vegetation-management pilot program with initial activities starting in 2017, and the full program starting in 2018.

In relation to the cost adjustments included in the proposed revenue requirement, in 2017, the Company is proposing to initiate its Vegetation Management RTW Pilot to conduct state-of-the-art LiDAR inspection and analysis and additional mid-cycle pruning activities at a total cost of $3,521,000 in 2017. Initiating this process in 2017 would allow the Company to prove the concept and ramp up to full pilot activities beginning in 2018. Because this activity will be completed prior to the implementation of new rates in this proceeding, the Company is requesting the Department allow the Company to defer the cost of the activities in 2017 (estimated to be approximately $3.5 million) and amortize them in rates over five years. These costs are split between NSTAR Electric and WMECO based on the customer allocator, or 85 percent to NSTAR Electric and 15 percent to WMECO. This results in an annual expense for NSTAR Electric customers of $601,105, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-15, Page 3, line 41, and an amount of $103, 095 for WMECO customers as shown on Exhibit ES-DPH-2 (West), Schedule DPH-15, Page 1, line 41.

The Company also proposes to initiate its full Vegetation Management RTW Pilot Program in 2018. The activities comprising the Vegetation Management RTW Pilot Program are described in the testimony of Company Witness Vera L. Admore-Sakyi. However, starting in 2018, the total annual costs associated with the Vegetation Management RTW Pilot Program are $22,150,920 for NSTAR

Electric, as detailed in Exhibit ES-DPH-2 (East), Schedule DPH-15, page 3. For WMECO, the total cost is $3,799,080, as detailed in Exhibit ES-DPH-2 (West), Schedule DPH-15, page 1.

Q. What is the Company's ratemaking proposal with regard to the Vegetation Management RTW Pilot Program?

A. As described previously, the Company is requesting the Department allow the Company to defer the expense associated with 2017 Vegetation Management RTW Pilot Program activities as these costs are not currently reflected in rates and are significant in nature. The Company is proposing to amortize these costs in rates over a period of five years, for a total annual cost of $704,200 split 85 percent to NSTAR Electric and 15 percent to WMECO.

For 2018 and beyond, the Company's total annual vegetation management expense is $25,950,000 per year, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-15, page 3. Details supporting the derivation of this amount are provided on Exhibit ES-DPH-3 (East), WP DPH-15 for NSTAR Electric. The corresponding schedule in Exhibit ES-DPH-3 (West) provides the supporting documentation for the amounts reflected in WMECO's revenue requirement.

The Company is proposing that this amount be collected in rates annually, subject to refund at the time of the Company's next base-rate proceeding, if not expended in furtherance of program activities. This will serve as a protection to customers, if, for example, the program costs less than estimated by the Company for any reason. The Company would return the full amount of the over-collection to customers as of the time new rates are set in the next base rate proceeding. As shown on Exhibit ES-DPH-3 (East), WP DPH-15, page 1, the annual pilot expenses are comprised of a combination of one-time, non-recurring activities (such as the Aerial LiDAR Survey of the entire Massachusetts distribution system) and annually recurring expenses. As a result, the Company has "normalized" the annual cost in rates, so that the cost of those one-time items is spread over time. This means that the Company's actual annual Vegetation Management RTW Pilot Program costs may be more or less than the total amount of $25,950,000 in a given year. However, the Company is proposing to establish a reserve fund to record the recovery of the fixed amount through base rates, as well as to record all Vegetation Management RTW Pilot Program expense activity, so that any amount over recovered at the time of the next base rate proceeding would be returned to customers.

The total costs associated with the above described Vegetation Management RTW Pilot activities is $22,752,025 for NSTAR Electric, as detailed in Exhibit ES-DPH-2 (East), Schedule DPH-15, page 3. For WMECO, the total cost is $3,902,175, as detailed in Exhibit ES-DPH-2 (West), Schedule DPH-15, page 1.

Q. How is the Company proposing to implement the Vegetation Management RTW Pilot between the NSTAR Electric and WMECO service territories?

A. As described by Company Witness Vera Amore-Sakyi, the Company is proposing to implement the pilot as a single, consolidated program. Although the funding levels will be established in base rates per the description above, NSTAR Electric and WMECO are fully integrated from a management and operational perspective. Implement the program on a consolidated basis, rather than as separate, distinct programs, will enable the Company to focus its RTW Pilot initiatives in the areas with the greatest benefit to customers.

10. RATE-CASE EXPENSE

Q. Was it necessary for the Company to retain outside consultants and legal services for this case?

A. Yes. The Company retained the services of four expert consulting firms and one law firm to assist with the presentation of this case. All of these services were retained through a competitive bid process. Specifically, the Company is utilizing the following vendors: (1) John J. Spanos of Gannett Fleming LLC for the depreciation study; (2) Robert B. Hevert of Sussex Economic Advisors for cost of capital and capital structure; (3) Melissa Bartos and David Heintz of Concentric Economic Advisors for the marginal cost study and allocated cost of service study ("ACOSS"), respectively, and also James D. Simpson of Concentric Economic Advisors for assistance in rate design and rate consolidation; (4) Mark E. Meitzen, Ph.D of Christensen Associates to present the economic analysis of electric-industry cost trends to establish the revenue-cap formula that would apply in the PBRM.; and (5) the law firm of Keegan Werlin LLP ("KW") for legal services.

Q. Did you participate in the process to procure outside services for this case?

A. Yes. I supervised and participated in the procurement process for the cost of capital/capital structure witness and the PBRM witness, as well as the process to retain outside legal services. The procurement process for the depreciation study and the marginal cost study, ACOSS, and rate design witnesses were directly conducted by the subject matter experts within the Eversource accounting group and rates group, respectively. However, I am informed as to the steps that they took to conduct the procurement process, and they were consistent with the process used for all other outside services.

Q. Please describe the general process that was utilized to retain the Company's external witnesses and service providers.

A. The Company invited a set of skilled vendors to participate in each RFP, and established an electronic bidding process through the Ariba system. The Company designated an internal review committee for each RFP to evaluate submitted bids. The bid evaluation included a review of the vendors' qualifications and relevant experience, capabilities and personnel to support the Company's rate petition, proposed fee structure and other factors. In some cases, the committees conducted interviews with vendors as part of the overall evaluation process. The Company's external witnesses and service providers were ultimately selected based on this evaluation process and determination of the vendor that could provide the necessary service at a reasonable price.

Q. Please describe any relevant details specific to the procurement of the Company's cost of capital/capital structure witness.

A. The RFP process for selection of the cost of capital/capital structure witness was conducted during June 2016. I participated on the internal review committee for this process along with the Company's Vice President of Rates and Regulatory Requirements and a Procurement Consultant from the Purchasing Department. The committee developed an initial list of five qualified vendors, with input on vendors taken from a list that was developed for a similar solicitation process recently conducted by Connecticut Light and Power ("CL&P"), an Eversource Energy operating company, for its 2014 rate case; from the NSTAR Gas rate case in 2014; and from other similar solicitations. The committee selected all five potential vendors on that list to participate in the cost of capital/capital structure RFP. After issuing the RFP to those vendors, the Company received qualifying bids from four firms. The committee evaluated the bids based on key criteria that included commercial pricing, commercial compliance, and assessed expertise in the areas of cost of capital, capital structure, decoupling, and prior experience as an expert witness. Mr. Hevert of Scott Madden Management Consultants was ultimately retained as the Company's expert witness as a result of this process.

Q. Please describe any relevant details specific to the procurement of the depreciation study witness.

A. The RFP process for selection of the depreciation witness was conducted in September 2013. The RFP sought bids on a scope of work that would support the NSTAR Electric and WMECO rate case, as well as rate case filings for other Eversource Energy operating companies. Once the process began, all communications including bid packages from prospective bidders were managed by the Purchasing Department. The scope of work included anticipated timeline, the types of schedules and analysis to be delivered and the number of FERC plant accounts involved. The internal review committee for this RFP consisted of five staff members from the Plant Accounting department, including the Director of Accounting and Manager of Plant Accounting. The committee developed a list of qualified vendors and issued the RFP to four consulting firms. The Company subsequently received qualifying bids from three firms. The committee evaluated the bid packages based on ability to meet scheduled commitments; company background, including industry reputation, prior rate case experience, personnel qualifications, support staffing model, and price. Mr. Spanos of Gannett Fleming was selected as the Company's expert witness on depreciation as a result of this process.

Q. Please describe any relevant details specific to the procurement of the marginal cost study witnesses.

A. The RFP process for selection of experts for the marginal cost study was conducted from May through July 2016. The internal review committee for this process included the Company's Director of Rates, Manager of Rates and a Procurement Consultant from the Purchasing Department. The committee developed a list of four qualified vendors that were invited to participate in the RFP. The Company received qualifying bids from one vendor.

The committee evaluated the bids based on the following six criteria: (1) corporate capability, including overall experience and corporate experience with similar issues, with NSTAR Electric, Eversource Energy and other affiliates, and with the Department; (2) project team capabilities, including qualifications of the proposed staff, and qualifications of the proposed staff in the subject matter; (3) the technical approaches, including the response to the RFP requirements and proposed innovative approaches; (4) proposal quality; (5) pricing, including the proposed price for the work and proposed unit rates, including markup; and (6) a commercial review, including both minor and major commercial impediments (e.g., conflicts of interest, etc.). Ms. Bartos of Concentric Economic Advisors was selected as the Company's expert witnesses on this topic as a result of this process.

Q. Please describe any relevant details specific to the procurement of the allocated cost of service study and rate design witnesses.

A. The RFP process for selection of experts for the allocated cost of service study ("ACOSS") and rate design was conducted from January through March 2016. The internal review committee for this process included the Company's Director of Rates, Manager of Rates and a Procurement Consultant from the Purchasing Department. The committee developed a list of six qualified vendors that were invited to participate in the RFP. The Company received qualifying bids from three consulting firms.

The committee evaluated the bids based on the following six criteria: (1) corporate capability, including overall experience and corporate experience with similar issues, with NSTAR Electric, WMECO, Eversource Energy and other affiliates, and with the Department; (2) project team capabilities, including qualifications of the proposed staff, qualifications of the proposed staff in the subject matter and the flexibility to work closely with Eversource staff; (3) the technical approaches, including the response to the RFP requirements and proposed innovative approaches; (4) proposal quality; (5) pricing, including the proposed price for the work and proposed unit rates, including markup; and (6) a commercial review, including both minor and major commercial impediments (e.g., conflicts of interest, etc.). The committee conducted interviews with key personnel of the three participating firms. Mr. Heintz was selected as the

Company's expert witnesses on the ACOSS and Mr. James D. Simpson was selected as the Company's expert witness on rate design and consolidation, both of Concentric Economic Advisors.

Q. Please describe any relevant details specific to the procurement of the Company's incentive-based or performance-based distribution ratemaking witness.

A. The RFP process for the selection of the performance-based ratemaking witness was conducted from June through July 2016. I participated on the internal review committee for this process, along with the Company's Vice President of Rates and Regulatory Requirements and a Procurement Consultant from the Purchasing Department. The committee developed the RFP and issued it to six firms, and subsequently received qualifying bids from all six firms. Bids were evaluated on six dimensions: (1) overall capability; (2) project team capabilities, including qualifications of the proposed staff and qualifications of the proposed staff in the subject matter; (3) the technical approaches including the response to the RFP process; (4) proposal quality; (5) pricing, including the proposed price for the work and proposed unit rates, including markup; and (6) a commercial review, including both minor and major commercial impediments (e.g., conflicts of interest, etc.) The committee conducted interviews with key personnel of select firms. Mr. Mark E. Meitzen, of Christensen Associates was selected as the

Company's expert witness of the performance-based ratemaking topic as a result of this process.

Q. Please describe any relevant details specific to the procurement of the Company's outside legal services for this case.

A. The RFP process for outside legal services was conducted in June through July 2016. I participated on the internal review committee for this process, along with the Company's Vice President of Rates and Regulatory Requirements, the Chief Regulatory Counsel of the Legal Department and a Procurement Consultant from the Purchasing Department. The committee developed the RFP and issued it to five law firms, and subsequently received qualifying bids from four firms. Bids were evaluated on five dimensions: (1) overall capability; (2) experience and expertise of staff; (3) familiarity with the electric-distribution business, the Department and the Company; (4) fee structure and cost containment; and (5) commercial terms and lack of potential conflicts. The review committee ultimately selected KW to represent the Company for this rate application.

Q. Is the Company proposing to recover its rate-case expense in this proceeding?

A. Yes. NSTAR Electric is proposing to recover rate-case expense totaling $2,359,880 based on a 5-year amortization period, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-16 and the accompanying workpaper in Exhibit ES-DPH-3 (East). Also as shown on Exhibit ES-DPH-2 (East), Schedule DPH-16, the annual expense amount included in the NSTAR Electric revenue requirement is $471,976. WMECO is proposing to recover rate-case expense totaling $1,556,395 based on a 5-year amortization period, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-16 and the accompanying workpaper. Also as shown on Exhibit ES-DPH-2 (West), Schedule DPH-16, the annual expense amount included in the WMECO revenue requirement is $311,279.

Q. How did NSTAR Electric and WMECO develop the estimated rate-case expense for this proceeding?

A. Eversource developed the estimates set forth in NSTAR Electric's Exhibit ES-DPH-2 (East), Schedule DPH-16 and WMECO's Exhibit ES-DPH-2 (West), Schedule DPH-16 based on discussions with outside consultants and an evaluation of the costs incurred in prior regulatory proceedings. Eversource will update and confirm the actual expenses incurred as the proceeding progresses, as is consistent with Department precedent. The Company recognizes that, because of the extended duration of the proceeding, costs to conduct the proceeding will likely differ from the estimated amount. Eversource will work to control rate-case expense as circumstances occur by closely monitoring the costs of its outside consultants. Eversource will review each invoice for accuracy and reasonableness and maintain a spreadsheet identifying when each invoice is approved for payment and charged to the appropriate account on NSTAR Electric and WMECO's respective general ledgers.

Q. What is the basis for the Company's proposed 5-year recovery period?

A. The Department's historical practice for determining the proper normalization period for rate-case expense was to compute the average period between a company's four most recent rate cases. Using the Department's historical method, the average period between the last four rate cases is eight years for NSTAR Electric as calculated in Exhibit ES-DPH-4, Schedule DPH-6 (East), page 2. The average period between the last four rate cases for WMECO is also eight years as calculated in Exhibit ES-DPH-4, Schedule DPH-6 (West), page 2.

However, Massachusetts law now dictates that electric companies must file base-rate proceedings no later than every five years, except in limited circumstances. Accordingly, in D.P.U. 15-155, the Department found that the G.L. c. 164, § 94 requirement for electric companies to file rate cases every five years effectively caps the normalization period at five years. Therefore, in instances where a normalization period calculated pursuant to Department precedent results in a period greater than five years, the Department will instead impose a five-year normalization period. D.P.U. 15-155, at 244.

In accordance with these directives, the Company has proposed a 5-year normalization period for rate-case expense in this proceeding.

11. Regulatory Assessments

Q. Have NSTAR Electric and WMECO made adjustments for regulatory assessments?

A. Yes. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-17, Column D, for NSTAR Electric the adjusted test year regulatory assessment expense, adjusted to remove transmission related expenses and out of period adjustments totals $6,713,485. This amount is comprised of 3 invoices received during the test year: (1) AGO Assessment of $789,893; (2) General Assessment $3,849,604; and (3) Trust Assessment $2,073,988. The invoices supporting these amounts are provided in Exhibit-ES-DPH-4, Schedule DPH-7 (East). Similarly, for WMECO the adjusted test year regulatory assessment expense equals $1,148,553, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-17. This amount is comprised of three invoices received during the test year: (1) AGO Assessment of $135,136; (2) General Assessment $658,596; and (3) Trust Assessment $354,821. The invoices supporting these amounts are provided in Exhibit-ES-DPH-4, Schedule DPH-7 (West).

Annually regulatory assessments levied by the Department are allocated to each electric or gas company based on each company’s proportionate share of total intra-state operating revenues. Total intra-state operating revenues includes distribution revenues and other revenues, including various reconciling rate mechanisms, including basic service energy costs. The Company is proposing in this proceeding to allocate a portion of the regulatory assessment expense to basic service, and has included a post-test year adjustment to distribution rates in this proceeding as a result.

As shown on Exhibit ES-DPH-2 (East), Schedule DPH-17, the post-test year adjustment associated with regulatory assessments for NSTAR Electric is a decrease of $2,188,739. As shown on Exhibit ES-DPH-2 (West), Schedule DPH-17, the post-test year adjustment associated with regulatory assessments for WMECO is a decrease of $374,453. The decreases associated for each company are a result of the allocation of 33 percent of the regulatory assessment expense to Basic Service, which represents the portion of total intra-state operating revenues related to Basic Service in 2015, which is the most recent full year available. This calculation is also shown on Exhibit ES-DPH-2 (East), Schedule DPH-17 for NSTAR Electric and Exhibit ES-DPH-2 (West), Schedule DPH-17 for WMECO.

Effective January 1, 2018, the Company proposes to allocate the proportionate share of regulatory assessments received to Basic Service by multiplying the amount of the regulatory assessment received by the percentage of Basic Service revenues over total intra-state revenues. Because the Company proposes to recover a portion of regulatory assessments through the Basic Service mechanism going forward, the Company has reduced the test year distribution revenue requirement proposed in this case.

As the 2017 regulatory assessments are expected to be known and measurable by the time the record closes in this case, the Company plans to update these amounts to the actual cost levels for NSTAR Electric and WMECO.

12. LEASE EXPENSE

Q. What adjustments have you made to increase test year lease expenses for NSTAR Electric and WMECO?

A. As shown on Exhibit ES-DPH-2 (East) and Exhibit ES-DPH-2 (West), Schedules DPH-18, the post-test year adjustment associated with lease expense is an increase of $400,375 for NSTAR Electric and an increase of $13,819 for WMECO. The computation of the pro forma expense levels are shown in Exhibit ES-DPH-2 (East), Schedule DPH-18, page 2 for NSTAR Electric and Exhibit ES-DPH-2 (West), Schedule DPH-18, page 2 for WMECO. These adjustments pertain to the lease for the Waltham Service Center, intercompany rent for the Eversource Southborough facility, WMECO communications leases and the Lee satellite facility and accounts for known and measurable changes in rent expense through July 1, 2018.

Waltham Service Center Lease – NSTAR Electric executed a new lease for the Waltham Service center in August 2016 prior to the expiration of the third and final extension term of the existing lease for the premises. The annual lease for the Waltham facility increased from $12,600 to $454,344. This lease amount is charged to both expense accounts and capital and other balance sheet accounts. The resulting expense adjustment, shown on Exhibit ES-DPH-2 (East), Schedule DPH-18, page 2 represents an increase of $348,749 to NSTAR Electric Distribution Operations Rent.

Southborough Intercompany Rent – this is a shared facility owned by NSTAR Gas. Based on square footage occupancy of the facility, 25 percent of the revenue requirement is allocated to NSTAR Electric through intercompany rent charges. WMECO is not allocated a portion of the Southborough facility revenue requirement. The post-test year adjustment of $71,462 reflects an increase in the net plant value of the Southborough facility and an increase in the NSTAR Electric occupancy rate of the facility from 25 percent to 32 percent.

WMECO Communications Leases – WMECO has leases with several communications companies for support of distributions operations equipment. Payments under these leases increase at scheduled intervals, resulting in a post-test year increase of $12,795 for WMECO communication lease expense.

Lee Satellite – WMECO leases a satellite facility in Lee, Massachusetts under an agreement that includes annual increases in payments beginning September 2016. A post-test year adjustment of $1,342 was made to reflect schedule increases in lease payments.

13. INFORMATION SYSTEMS EXPENSE ADJUSTMENT

Q. Please describe the Information System Expense Adjustment.

A. The Information System Expense Adjustment is required in order to reflect the additional costs associated with a significant Service Company project (the "Supply Chain Project") anticipated to commence service during the course of this proceeding. Information System projects that support multiple operating companies are recorded by the Service Company and associated costs charged to the operating companies via the GSCOH. The GSCOH is an adder to labor and is charged to the account where the associated labor is charged. Therefore, costs are reflected in the cost of service as a post-test year adjustment to expense, rather than as an increase to Plant in Service.

The Supply Chain Project will consolidate and standardize all supply chain processes and practices across each Eversource Energy operating company in order to eliminate redundancy, leverage industry-best practices and introduce state-of-the-art technology to sourcing, contracting and materials management-related activities. As part of the overall project, and in order to meet current and future business needs and objectives, the Company will deploy three modern software tools – Ariba, Maximo and Oracle Accounts Payable. These new tools will make the Company's systems more user-friendly and intuitive, and will simplify day-to-day work activities.

The project integrates business processes and leverages state-of-the-art software to:

- Improve vendor management and inventory accuracy;
- Increase electronic invoices and payment;
- Increase transaction and workflow automation; and
- Improve analytics for cost management and reporting.

The Company launched the Ariba Sourcing platform in January 2016. As a result, suppliers currently register through Ariba to begin the procurement process. The Company is leveraging best-in-class sourcing processes for bidding, evaluating proposals and awarding contracts.

The remaining portion of the Supply Chain Project, including the implementation of Maximo, four Ariba modules to enable additional functionality, and Oracle Accounts Payable, are anticipated to be in service during the course of this proceeding. After the project is complete, all requisitions and purchase orders will originate in Maximo and the Company will experience streamlined access to supplier sites and industry standard catalogues, improved inventory management through better demand planning, and automated materials management process.

Q. How does the Supply Chain Project affect ESC costs that are associated with services provided to NSTAR Electric and WMECO pursuant to executed service agreements?

A. Because the Supply Chain Project will be utilized by multiple Eversource operating companies, it will be recorded on ESC's books as a capital asset. Therefore, and as described previously, for purposes of determining the appropriate post-test year adjustment, the costs associated with this project will be reflected in NSTAR Electric and WMECO's revenue requirement as an adjustment to expense. The amount that will be shared by each operating company will be cost-based, and will be included in the GSCOH charged by the service company. Therefore, the Information Systems Expense adjustment for NSTAR Electric and WMECO represents each Company's allocated portion of the Supply Chain Project's revenue requirement as of 2018, which is the rate year in this proceeding. As shown in Exhibit ES-DPH-4, Schedule DPH-8, page 3, the projected rate base as of December 31, 2018 is $24.6 million. The related revenue requirement amount of $6.7 million as shown on line 29 consists of the (i) pre-tax return on investment of $3.0 million as shown on line 25; and (ii) return of investment of $3.7 million as shown on line 27.

Q. Please describe the post-test year adjustments associated with the Supply Chain Project that you have made to the NSTAR Electric and WMECO revenue requirements.

A. The post-test year adjustments for NSTAR Electric is shown on Exhibit ES-DPH-2 (East), Schedule DPH-19, and for WMECO is shown on Exhibit ES-DPH-2 (West), Schedule DPH-19. As shown on each schedule, the adjustment to expense is based on the total project's estimated $6.7 million revenue requirement and adjusted for each affiliate as follows:

1. The total revenue requirement has been allocated to each affiliate based on the allocation percentage of 31.95 percent for NSTAR Electric and 5.06 percent for WMECO, which is based on the allocation percentage for budgeted service company labor. For NSTAR Electric, this percentage allocator is a total company allocator and includes Transmission. Therefore, for NSTAR Electric an additional adjustment is required (described below) to remove the portion of this expense attributable to Transmission. For WMECO, a similar adjustment is not required because this percentage does not include the WMECO Transmission segment. Therefore, a separate adjustment to remove the portion of expense attributable to WMECO Transmission is not required.

2. Service company employees perform both capital and expense functions. Therefore, the service company expense ratio of 71.92 percent is applied against the total for both NSTAR Electric and WMECO. This adjustment is necessary in order to include only the expense portion of the Supply Chain Project in the revenue requirement as a post-test year adjustment in this proceeding. The balance of charges (approximately 28 percent) is charged to capital or other balance sheet accounts, and therefore not included in the expense adjustment at this time.

3. Lastly, for NSTAR Electric, the expense portion is further adjusted to remove an amount attributable to Transmission.

The net increase to the revenue requirement of $1,362,605 for NSTAR Electric is shown on Exhibit ES-DPH-2 (East), Schedule DPH-19, page 2. The net increase to the revenue requirement for WMECO of $244,633 is shown on Exhibit ES-DPH-2 (West), Schedule DPH-19, page 2.

This expense adjustment is based on the estimated plant in service of approximately $37.5 million. However, because the actual amount of the project will become known and measurable during this proceeding, the Company will update the revenue requirement to reflect the appropriate expense levels based on the actual revenue requirement to be allocated to each entity, along with appropriate supporting documentation as it becomes available during this proceeding.

14. GIS VERIFICATION ADJUSTMENT

Q. Please describe the GIS Verification Adjustment reflected on Exhibit ES-DPH-2 (East), Schedule DPH-20.

A. Over the past few years, it has become clear to the Company that the data contained its current Graphic Interface System ("GIS") requires an upgrade in order to support any level of grid modernization, most particularly efforts relating to the integration of distributed energy resources ("DER"). The existing GIS was developed using historical paper records mapping the overhead distribution system as it was constructed. These historical records were created based on system needs and requirements at the time the records were created and, by design, did not capture the level of specificity as to customer connections and other information now necessary to move forward with technological innovation. Consequently, an upgrade to the data stored in GIS is a necessary, critical path item to make the best use out of the Company's new Outage Management System ("OMS") and to enable the Company's proposed Grid Modernization Base Commitment ("GMBC"), as well as other non-modernization requirements of the system.

The GIS Verification project would involve a detailed survey of the system, performed by an outside contractor, to create a very detailed mapping of customer connections on the overhead system; cataloguing the way in which those customers are feeding into the system and how the system connects to the customers (such as determining whether and where customers are connected to secondary circuits, whether secondary circuits are connected to transformers; and what transformers are connected to which phase). To perform the survey, the contractor would undertake a walkdown of the entire overhead system cataloging all customer connectivity and using a tool that determines the phase in the 3-phase power system to which customers are connected. This tool ensures all customers and transformers are correctly matched to a phase back to the substation.

In essence, the GIS Verification project will validate the interrelated geography and infrastructure of the system to create a refined, complete and accurate depiction of the system that would be helpful to all other processes and systems that rely on this GIS data. The GIS Upgrade project is important for customer satisfaction because it will improve the Company's ability to communicate with customers on outages and a range of other issues, including DER interconnection. The Company has issued an RFP for contract services to perform the survey and has received indicative pricing of $5 million.

Q. Please further describe why the GIS Verification Project is necessary at this time.

A. Verifying and correcting the data contained in GIS will serve to enable the Company's proposed GMBC and will allow the Company to optimize the use of its new OMS. The GIS Verification project will assist the Company in: (1) achieving the capability to quickly identify and respond to customer outages; (2) implementing automated communication with customers affected by outages; and (3) managing the distribution system from both a capacity and voltage perspective. The GIS Verification project is anticipated to aid in the continued safe and efficient identification and restoration of outages.

Historically, connectivity was not as important as it is today. In the past, if a customer had an outage, the customer would call the Company to report the outage or service issue, which would result in the creation of a service order and the dispatch of a Company troubleshooter to identify and fix the issue. If multiple customers called in, these calls were manually grouped in the OMS system (which gets its model from the GIS system) and analyzed to determine a probable device outage. A crew would then be dispatched based on this manual analysis.

Today, the Company relies on automated systems to perform this analysis and determine a probable device outage. This analysis uses software and algorithms to determine the likely device outage based on the number and location of customer calls coming into the Company's call center. Therefore, if the model is wrong based on inaccurate connectivity data contained in GIS, the prediction can also be wrong. This could lead to dispatching a crew to the wrong location and slowing restoration or underestimating the size of the outage. For example, the system might determine there is an issue on only one phase when there are multiple phases out of service.

In addition to the restoration activities undertake for customers who have actually lost power, the Company also notifies customers of outages as it becomes aware of those outages, so that customers can be informed on status when they are out and when they can expect service to be restored. The determination and communication of ETR is accomplished automatically through the Company's

Interactive Voice Response system. When connectivity data is wrong, the system may incorrectly determine a customer is without power and initiate communication to people that are not out of power or, conversely, not initiate this communication to customers who are in fact without power. As the Company continues to advance its outage management capabilities and communication processes, the tools and applications and data connectivity in the system models becomes critical.

In addition to managing the Company's response to customer outages, the GIS Verification project will also enhance the Company's ability to manage the distribution system. Distribution system studies are completed using models of the system and customer load from transformer and substation load data. The accuracy of the results of these studies is dependent on the accuracy of the information we have in these other systems, in addition to the planners' and engineers' own knowledge of the system. As the operation and use of the distribution system continues to change, particularly by adding significant mass of distributed energy resource, there is an increasing need to be able to manage the system on a more real time basis. Real time system management relies on models and information that require a much higher degree of accuracy than was needed in the past because operators will be making real time decisions based on the information contained in the system.

Q. Please describe the post-test year adjustments associated with the GIS Verification project made to the NSTAR Electric revenue requirement.

A. The GIS Verification project is a significant undertaking that requires a full system field review, data collection, and data assembly into a format that can be uploaded into the Company's GIS system. The Company initiated an RFP process in order to determine the appropriate range of cost estimates and to ensure the Company received the lowest possible cost for completing this effort. At the time of this filing the Company is in the process of evaluating RFP responses and negotiating a final contract, subject to regulatory approval in this proceeding. The Company anticipates having this contract finalized during the course of this proceeding and will update the revenue requirement to include the final agreed-to cost based on that contract.

For purposes of the revenue requirement, I have included a total cost estimate of approximately $5.1 million as shown on Exhibit ES-DPH-2 (East), Schedule DPH-20. This amount is based on the responses to the RFP and the Company's expectation on the final negotiated cost amount. Because this is a one-time, non-recurring expense, the Company is proposing to amortize this significant expense over a five-year term. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-20, this results in an annual increase to expense for NSTAR Electric of $1,023,615.

15. STORM COST RECOVERY

Q. Please provide a brief description of the Company's proposals in this proceeding regarding storm cost recovery.

A. There are three components of the Company's proposal related to storm cost recovery for qualifying storm events in this proceeding. These components are listed below and are described in more detail in the pages that follow:

(1) **Storm Fund Adjustment**: The Company is proposing certain adjustments to the mechanics and to the level of base-rate contribution to the Storm Fund mechanism currently in effect for both NSTAR Electric and WMECO. These changes would take effect with the implementation of new rates in this proceeding and would apply for qualifying storm events occurring on and after January 1, 2018. The various elements of the Company's Storm Fund proposal are described in more detail below. The adjustment to the test year level of expense that results is shown on Exhibit ES-DPH-2 (East), Schedule DPH-21, Page 1 for NSTAR Electric and Exhibit ES-DPH-2 (West), Schedule DPH-21, Page 1 for WMECO.

(2) **Storm Cost Adjustment**: As a result of the changes proposed relating to the Storm Fund Adjustment, it will be necessary to include a normalized level of storm costs in the revenue requirement. This adjustment to expense is required in order that the storm cost deductible (i.e., the amount

of storm costs incurred below the qualifying storm threshold level, not includable for deferred treatment to the Storm Fund) is included in rates. This adjustment is described in more detail below, and the adjustment to the resulting test year level of expense is shown on Exhibit ES-DPH-2 (East), Schedule DPH-21, Page 3 for NSTAR Electric and Exhibit ES-DPH-2 (West), Schedule DPH-21, Page 3 for WMECO.

(3) **Recovery of Outstanding Storm Cost Balance**: The Company, and in particular NSTAR Electric, has a significant outstanding balance of unrecovered storm costs for qualifying storms that have occurred since 2012, but for which the Company has not yet started recovering costs above the base amount in rates. In addition to those storms that have occurred, the Company may also incur additional costs for qualifying storms prior to January 1, 2018. As described in more detail below, the Company is proposing to begin recovery of balance of unrecovered costs effective January 1, 2018.

A. Storm Fund Adjustment

Q. Please provide a brief description of NSTAR Electric's existing Storm Contingency Fund ("NSTAR Electric Storm Fund").

A. The NSTAR Electric Storm Fund was initially established in the NSTAR Electric Restructuring Settlement (D.T.E. 96-23) and subsequently updated in NSTAR

Electric's most recent general distribution rate proceeding (D.T.E. 05-85). Provisions included in the D.T.E. 96-23 Electric Restructuring Settlement allowed Boston Edison Company to establish a storm reserve fund of $8 million (using proceeds from the sale of Clean Air Act Emission Allowances) in order to pay for the incremental O&M costs as a result of major storms over $1 million. Further, the D.T.E. 96-23 Electric Restructuring Settlement established that, after storm costs have been paid from the fund, Boston Edison would restore the storm fund balance to $8 million by contributing funds from distribution-maintenance expense up to a maximum of $3 million per year until the fund reached the $8 million level. D.T.E. 96-23, Attachment 2.

Subsequently, provisions of the D.T.E. 05-85 Rate Settlement increased the maximum fund level from $8 million to $13.5 million and increased the annual contribution to the fund from distribution-maintenance expense from a maximum of $3 million per year up to a maximum of $4.5 million per year. D.T.E. 05-85, at 13.

Q. Please provide a brief description of WMECO's existing Storm Contingency Fund ("WMECO Storm Reserve").

A. The WMECO Storm Reserve was initially created through provisions of a rate settlement agreement approved by the Department in D.T.E. 06-55. The provisions of the D.T.E. 06-55 Settlement Agreement established a Storm

Reserve for recovery of incremental storm costs exceeding $300,000 per event, beginning with a $300,000 initial funding level. WMECO was authorized to fund an additional $300,000 annually to the storm reserve through an accrual in the distribution component of rates.

In WMECO's subsequent base-rate proceeding, D.P.U. 10-70, the Department authorized an annual contribution to the WMECO Storm Reserve of $575,000. In addition, the Department authorized the Company to recover both the $575,000 annual contribution and any eligible incremental storm costs through an annual reconciling charge, while also setting a cap of $3 million on the reserve account. In the event the fund exceeds the $3 million cap, the excess amount must be returned to customers 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 are prudently incurred. Incremental expense falling below $300,000 is not eligible for recovery through the WMECO Storm Reserve as a result of the Department's decisions in D.P.U. 10-70.

Q. What is the benefit to customers of providing for storm-cost recovery through a separate reconciling factor?

A. The Department recently considered the question of whether storm fund recovery should continue for National Grid in D.P.U. 15-155. In that case, the Department considered and approved National Grid's request for continuation of its storm fund. In reaching this decision, the Department expressed that its primary objective for allowing a storm fund is to levelize storm restoration costs of major storms on ratepayers. D.P.U. 15-155, at 73. The Department further stated that:

> [T]he Department has devoted significant time and resources to the improvement of each electric utility's storm response. As a result, storm response requirements are now more formalized, more comprehensive, and more rigorous. In order to meet these requirements, electric distribution companies are expected to properly prepare for and implement storm response measures that restore power safely and expeditiously. These obligations require the Company to devote substantial resources to achieving the desired results. Further, as recent history indicates, the frequency and severity of major storm events has increased. Not surprisingly, the costs of responding to those events to restore power for customers in an expeditious fashion have increased as well.

D.P.U. 15-155, at 74 (citations omitted).

Based on this reasoning, the Department found that, without a storm fund mechanism, it is unlikely that National Grid could have absorbed its storm costs without filing a base-rate case, or even multiple rate cases, which could have resulted in an increase in rates to customers for other costs. Therefore, the Department determined that it appropriate to continue operation of National

Grid's storm fund, on the basis that, if properly structured, the storm fund can provide for adequate recovery of storm costs from customers in a manner that is designed to create rate stability. D.P.U. 15-155, at 75.

The circumstances are no different for Eversource. Since 2010, NSTAR Electric and WMECO have collectively experienced 21 major storm events with incremental costs per storm in excess of $1.2 million, generating approximately $213 million in incremental O&M storm-related costs.[3] This level of major storm cost has arisen due to the fact that the cost of storm response has escalated. Cost escalation has occurred due to factors such as: (1) the increased regional focus on storm response, which drives demand for crew resources when weather events are anticipated; (2) the Department's establishment of rigorous Emergency Response Plan ("ERP") requirements; and (3) the enactment of legislation in 2010 allowing the imposition of penalties up to $20 million per event for deficient storm response. There is no historical parallel to the risks, challenges and demands that electric companies now confront, which arise from the increasing frequency and intensity of weather events and the coinciding pressure to restore power in shorter

[3] See Exhibit ES-DPH-2 (East), Schedule DPH-21, page 2. As described later my testimony, the Company's proposal is to increase the threshold for Storm Fund treatment on a consolidated company basis to $1.2 million per storm event. This represents an increase over current levels for WMECO from $300,000 to $1.2 million and for NSTAR Electric from $1 million to $1.2 million. Therefore, for purposes of this analysis, the Company has included only those events with incremental costs exceeding the proposed $1.2 million threshold in the total storm expense of $213 million. The total costs of $187.5 million for the 21 storm events shown on this schedule are net of the $1.2 million proposed deductible. Total costs including the $1.2 million deductible are $212.7 million.

and shorter timeframes. Storm restoration costs are significant, unpredictable and persistently recurring, which makes these costs inordinately unsuitable for base-rate recovery.

In addition, any administrative burden in relation to Department oversight storm fund mechanisms can be mitigated with a storm-fund design that provides for administrative proceedings only in situations where the deferral balance passes a threshold of significance. Also, the potential burden of interim proceedings between rate cases is outweighed by the fact that, without a storm fund mechanism, the Department would have to include greater levels of storm costs in base distribution, or would have to anticipate more frequent rate cases than would exist with a more flexible mechanism.

For example, if the Company were not permitted to maintain a Storm Fund, the current annual base-rate allowance of $5,075,000 (including the $4.5 million base rate contribution to the Storm Fund for NSTAR Electric and the $575,000 annual contribution amount currently recovered by WMECO through its annual storm reconciliation charge) would be insufficient to recover a representative annual amount of incremental storm costs based upon the Company's actual major storm cost experience.

Accordingly, the Company is proposing to continue with the general mechanics of a Storm Fund mechanism, albeit on a consolidated basis and subject to certain modifications to lessen the administrative burden and realign the risks associated with cost recovery to establish symmetry between the interests of customers and the Company.

Q. What is the Company's proposal in this proceeding with regard to the Storm Fund Adjustment framework?

A. There are six components to the Company's Storm Fund Adjustment proposal for storms occurring on and after January 1, 2018, most of which were modeled after the storm-cost recovery treatment approved by the Department in D.P.U. 15-155. In fact, as described in more detail below, the Company is proposing a framework that in most respects is virtually identical to the orders by the Department in D.P.U. 15-155.

First, for the reasons previously discussed, it is imperative to continue the operation of a Storm Fund. There is no interest served by limiting recovery to an annual base-rate contribution where there is a potential for recoverable costs to be on the order of $200 million or more over a five-year period. Accordingly, the Company is proposing to continue storm-fund recovery in this case through a storm-fund mechanism, but to consolidate the storm funds currently in existence for NSTAR Electric and WMECO to create a single Storm Fund for both companies beginning with storms occurring after the effective date of new rates in this proceeding.

Second, the Company is proposing that incremental costs associated with storm events would be subject to a single "deductible" for the consolidated Storm Fund, which the Company is proposing would be $1.2 million, as compared to the current thresholds of $300,000 for WMECO and $1 million for NSTAR Electric.

Third, the Company is proposing that the Department include an annual contribution to the Storm Fund through base rates in the amount of $10 million on a consolidated basis, or in the amount of $8 million for NSTAR Electric and $2 million for WMECO. This amount of $10 million is greater than the current annual allowance of $5,075,000 (the sum of NSTAR Electric's $4.5 million and WMECO's $575,000 contribution), but represents a level commensurate with more recent storm-cost experience (and with the Department's decision in D.P.U. 15-155).

Fourth, the Company is proposing to establish a symmetrical cap of $30 million to trigger either a customer refund or a storm-cost recovery filing. In conjunction with the symmetrical cap, the Company is proposing that carrying charges at the Prime rate be applicable to both positive and negative balances in the Storm Fund beginning with the date of the storm event.

Fifth, the Company is proposing that the Department defer recovery of costs associated with storm events to the Company's next base-rate case where the incremental costs to restore power exceed $30 million, with carrying charges accrued at the Prime rate beginning with the date of the storm event, rather than accounting for these storm costs through the Storm Fund. This is generally consistent with the Department's directives in D.P.U. 15-155, at 82. However, the Company requests that, if the combination of any deferral balance and/or the balance in the Storm Fund exceeds $75 million, the Company may request that the Department allow the Company to commence collection of an annual "replenishment" amount to reduce the deferral balance, pending a full investigation of the Company's storm costs in a separate proceeding.

Lastly, the Company is proposing that the Department allow the deferral of "lean-in" costs incurred by the Company to mobilize for events that do not materialize to a level of significance. "Lean-in" would be defined exclusively as costs associated with external crews called upon by the Company in advance of approaching weather events. Typically, the Company incurs "lean in" costs for ERP events anticipated to be Level III or greater. If the Company incurs "lean in" costs, the Company should be allowed to defer these costs to the Storm Fund, regardless of whether the ultimate magnitude and cost of the storm event falls below the threshold. These costs are incremental, outside of the Company's control, and are not currently reflected in base rates.

Q. Please describe the Company's proposal with regard to the threshold for qualifying events.

A. The Company is proposing to increase the threshold for qualifying events in the same manner applied by the Department in increasing National Grid's threshold for qualifying events in D.P.U. 15-155. NSTAR Electric currently has a $1 million threshold for qualifying events, in which storms with incremental costs over $1 million qualify for recovery through the Storm Fund. All incremental costs, including the $1 million deductible, qualify for recovery. WMECO currently has a $300,000 threshold for qualifying events, in which storms with incremental costs over $300,000 qualify for recovery through the SRRCA. Unlike NSTAR Electric, the first $300,000 deductible does not qualify for recovery.

With the consolidation of the existing storm funding mechanisms into a single Storm Fund for both WMECO and NSTAR Electric, the Company is proposing to have one qualifying event threshold. In D.P.U. 15-155, the Department found that the threshold for National Grid should be increased by inflation based on the gross domestic product price index ("GDP-PI") from the U.S. Bureau of Economic Analysis for the period since its last rate case. D.P.U. 15-155, at 76. Therefore, in this proceeding, the Company has followed the same methodology adopted by the Department in D.P.U. 15-155, starting with NSTAR Electric's $1 million threshold increased by the cumulative inflation change from January 1, 2005 through December 31, 2016, equaling approximately 19 percent. This inflation increase changes the qualifying event threshold from $1 million to $1.2 million. The Company is proposing that the $1.2 million threshold would be applied to the combined storm-response operation of NSTAR Electric and WMECO, given that the two companies plan to legally consolidate effective January 1, 2018.

Q. Please describe the Company's proposal with regard to the annual level of customer contribution to the Storm Fund that it recovers through base distribution rates.

A. In D.T.E. 05-85, the Department allowed the Company to recover $4.5 million annually through base distribution rates as a contribution toward the Storm Fund. In D.P.U. 10-70, the Department approved WMECO to recover $575,000 annually in base storm funding through the SRRCA. In comparing the total $5.075 million Storm Fund allowance to actual storm costs experienced since 2010, it is apparent that the current level of annual funding is wholly insufficient. As referenced above, the Company has incurred approximately $213 million in total incremental O&M costs related to the 21 storm events experienced between February 2010 and February 2016. After removing the $1.2 million deductible per event, the Company calculates that this same level of storm experience would result in approximately $187 million to be recovered from customers for net incremental O&M costs, as shown on Exhibit ES-DPH-2 (East) and Exhibit ES-

DPH-2 (West), Schedule DPH-21, page 2 ($213 million net of $25.2 million of aggregate per-storm deductibles).

If the Company were to experience this same level of storms, over the same time period, and with the same combined level of base rate contribution to the storm fund of $5.075 million, the Company would be left with an unrecovered balance after six years of approximately $157 million ($187 million in recoverable storm costs, less $5.075 million base contribution per year for six years). At an annual replenishment rate of $5.075 million per year this would take nearly 31 years to recover, assuming no new storms, and *not accounting for carrying charges on the unrecovered balance.*

Q. Is the Company proposing to increase the Storm Fund contribution through base rates?

A. Yes. Given the large disparity between the annual average of incremental O&M costs related to qualifying storm events experienced during the last several years and the amount currently recovered through base distribution rates, in order to meet the Department's objectives of maintaining a sufficient reserve in the Storm Fund for the benefit of both customers and the Company, the Company is proposing a new annual base distribution rate allowance of $10 million, or an increase of $4.925 million on a combined basis for NSTAR Electric and WMECO, effective with the start of the rate year.

Q. How did the Company determine this amount?

A. The Company used the same methodology proposed by National Grid in D.P.U. 15-155 in order to determine a more appropriate level of base-rate contributions. To do so, and in an effort to balance customer rate impact and to normalize for truly extraordinary storm events, the Company eliminated the costs related to the two most extraordinary storms from the $187 million of total net incremental O&M costs, representing storms exceeding $30 million. These storms were the October 2011 Snowstorm and Blizzard Nemo, which occurred in February 2013, which had combined net incremental O&M costs of $92 million. The Company then used the same methodology proposed by National Grid in D.P.U. 15-155, by taking an average of the resulting costs of $96 million ($187 million minus $92 million) over the number of months between February 2010 through the end of the test year of June 30, 2016, or 77 months, to arrive at an annualized amount of $15 million, as shown on Exhibit ES-DPH-2 (East) and Exhibit ES-DPH-2 (West), Schedule DPH-21, page 2 for NSTAR Electric and WMECO, respectively.

In D.P.U. 15-155, the Department approved an annual contribution to the Storm Fund at $10.5 million based on the finding that this amount provides sufficient funds to levelize the rate impact for major storms that are eligible for recovery through the fund, while also decreasing the likelihood that the fund will have a large deficiency balance. D.P.U. 15-155, at 79. In this proceeding, the Company is striving to be as consistent as possible with the Department's decisions on storm funding for National Grid. Therefore, the Company is proposing to modify the amount recovered through base rates currently to increase that amount from a combined total of $5.075 million recovered today for NSTAR Electric and WMECO to $10 million rather than proposing the $15 million derived mathematically.

Q. How does the Company propose to collect the $10 million base distribution amount from NSTAR Electric and WMECO customers?

A. The Company proposes to collect the annual base distribution amount from NSTAR Electric and WMECO on an 80/20 basis, respectively. This split is determined by the ratio of NSTAR storm costs and WMECO storm costs to total net incremental storm costs from February 2010 through February 2016, as shown on Exhibit ES-DPH-2 (East) and Exhibit ES-DPH-2 (West), Schedule DPH-21, page 2. Therefore, the Company proposes that NSTAR Electric customers would pay $8 million annually, while WMECO customers would pay $2 million annually. This represents an increase over current levels of $3.5 million for NSTAR Electric customers, as shown on the referenced schedule. For WMECO customers this is shown as an increase of $2 million because the current base WMECO Storm Reserve contribution amount of $575,000 is currently recovered through the SRRCA, and not through base distribution rates as the Company is proposing in this proceeding.

Q. What would happen if the Company does not incur this level of incremental major storm restoration costs into the future?

A. Every dollar of the base-rate contribution for the Storm Fund is credited to the Storm Fund in order to levelize the impact of the costs associated with major storms. If actual annual major storm restoration costs incurred in future years prove to be less than the $10 million of annual Storm Fund contributions recovered through base rates, the Storm Fund will accumulate a surplus balance, and, as proposed by the Company and discussed below, would accrue a carrying charge on behalf of customers at the Prime rate as approved in D.P.U. 15-155.

Q. Please describe the Company's proposal with regard to the carrying charge rate to apply to the Storm Fund activity going forward.

A. The Department‘s primary objective for allowing a Storm Fund is to levelize storm restoration costs of major storms on ratepayers. D.P.U. 15-155, at 73. However, if the base level of funding is insufficient to cover the costs of Storm Fund activity, and absent a separate mechanism to achieve somewhat timely recovery, the Company will experience extraordinarily long gaps between the date of cost incurrence and full recovery through rates. This is evidenced by NSTAR Electric's experience. NSTAR Electric currently has a Storm Fund in a deficit (under-recovered) position of approximately $100 million. The majority of the costs driving this deficit balance were incurred for storms occurring in 2012 and 2013. Even assuming the Department approves the Company's proposal in this proceeding to recover these costs over five years starting January 1, 2018 (as explained below), this would result in a recovery lag of approximately a decade (i.e., 2012 through 2022). This lengthy delay in recovery has the equivalent financial effect of a "revenue lag" in that the Company is financing a significant investment over an extended period of time until the amounts are included in rates and recovered in revenues. For typical expenses, per Department precedent, that lag is incorporated in the cash working capital calculation as an element of rate base, and thus afforded carrying costs at the weighted average cost of capital in order to cover the carrying costs of financing over the long term the lag between revenues and expenses.

For storm cost recovery, however, and most recently in D.P.U. 15-155, the Department directed National Grid to accrue interest at the Prime rate, rather than at the weighted average cost of capital, irrespective of whether the Storm Fund balance represents a surplus or a deficit. D.P.U. 15-155, at 84. Although, the Company is not challenging the Department's ruling on carry charges here, there is no doubt that an investment of this type would call for carrying charges at the weighted average cost of capital be applied to the unrecovered Storm Fund balance (particularly when that balance will be carried for several years). In this proceeding, the Company is proposing to calculate carrying charges at the Prime rate on the balance of the Storm Fund (and on any storms in excess of $30 million excluded from the Storm Fund) from the date of the storm, consistent with what was approved in D.P.U. 15-155 with respect to the carrying charge rate. The Company is aware that National Grid has filed a Motion for Reconsideration requesting that the Department correct its decision and allow Prime rate carrying charges to be applied commencing with the date of the event. Eversource firmly supports that request and, consistent with that request, proposes that the Storm Fund approved by the Department in this case accrue interest at the Prime rate for both surplus and deficit balances, including the existing deficit balance, and be applied beginning with the date of the storm.

Q. What is the Company's proposal with regard to the cap under which the Storm Fund will operate going forward?

A. As previously mentioned, the Company is proposing a symmetrical cap of $30 million to trigger a storm cost filing to either credit an amount to customers for an over recovery, or to recover an amount from customers for an under recovery. In D.P.U. 15-155, the Department found that a symmetrical cap of $30 million on the Storm Fund balance is appropriate. D.P.U. 15-155, at 82. Therefore, the Company is proposing to implement the same the cap consistent with the Department's directives in D.P.U. 15-155.

Q. Is the Company proposing a change to the Storm Fund in regards to extreme storms over $30 million to prevent the balance from falling into a significant deficit?

A. Yes. In D.P.U. 15-155, the Department found that, in order to prevent the Storm Fund from falling into a significant deficit as the result of a single major storm event, it was necessary to exclude from Storm Fund eligibility any single storm event that exceeds $30 million in incremental costs. D.P.U. 15-155, at 82.

Here, the Company is proposing to adopt the same directive, with one adjustment. As noted by the Department, this change to the Storm Fund mechanism could trigger the filing of a base rate case if multiple storms of significant magnitude occur during the period in between base rate case filings. D.P.U. 15-155, at 82. In addition, if multiple extraordinary storms occur and recovery is postponed until the time of the next rate case, it will exacerbate bill impacts by pancaking (1) additional carrying charges that will accrue on the unrecovered balance, with (2) the base distribution rate increase that will result from the rate case.

Therefore, the Company is proposing to modify the Department's directive to allow the Company to submit a proposal to recover storm costs on an accelerated basis rather than excluding these costs entirely from Storm Fund eligibility until the time of the Company's next rate case. The Company is proposing that if the combination of single storm deferral balance (i.e., the sum total of all single storms in excess of $30 million) and/or the balance of the Storm Fund exceeds

$75 million, the Company may request to file for a "replenishment" factor, pending a full prudency review investigation. This would allow the Company to reduce the outstanding unrecovered balance, minimize applicable carrying charges, and mitigate bill impacts that would accompany the pancaking effect of significant storm-cost recovery on top of a base-rate increase in a future rate case.

Q. What is the Company's proposal regarding lean-in costs for storm events?

A. As described in the testimony of Company Witness Craig A. Hallstrom, the Company is proposing that the Department allow Storm Fund treatment of "lean-in" costs for third party costs incurred by the Company to mobilize for events that do not materialize to a level of significance. Typically, the Company incurs "lean in" costs for ERP events anticipated to be Level III or greater. In this proceeding, the Company has included an adjustment to normalize the level of storm expense in base rates associated with qualifying storm events (as explained below). However, currently there is no concept of recovery of "lean in costs" for ERP events that are activated, but the storm does not materialize. Although not a frequent event, it is appropriate to allow Storm Fund deferral treatment for costs associated with responding to an ERP, outside of the Company's control, and completely incremental to base rates, given that these costs are not recovered in base rates or otherwise. Therefore, the Company is proposing that if the Company incurs "lean in" costs for third-party contractors called in to assist in the restoration effort in advance of an ERP event that does not materialize, the Company should be allowed to defer these costs for recovery through the Storm Fund, regardless of the ultimate magnitude and cost of the storm.

B. Storm Cost Adjustment

Q. Please briefly describe the Company's proposed Storm Cost Adjustment.

A. As a result of the changes to the Storm Fund Adjustment, it is necessary to include a normalized level storm costs into the revenue requirement. This adjustment to expense is required so that the storm-cost deductible (i.e., the amount of storm costs below the qualifying storm threshold level) is included in rates. The adjustment to the test year level of expense that results is shown on Exhibit ES-DPH-2 (East), Schedule DPH-21, Page 3 for NSTAR Electric and Exhibit ES-DPH-2 (West), Schedule DPH-21, Page 3 for WMECO.

Q. Under the Company's proposal, if a storm event exceeds the $1.2 million threshold, how will the Company recover the amount below the threshold?

A. The Company's proposal is to recover this amount in base rates and not through the Storm Fund. Although NSTAR Electric is currently authorized to recover the amount below its $1 million threshold through its existing Storm Fund, the Company is proposing in this proceeding to adopt the model approved by the Department for National Grid in D.P.U. 15-155. In the Department's model, the threshold amount ($1.2 million per qualifying storm in this case) will be collected through base rates for a representative number of storms. In D.P.U. 15-155, the Department found that the representative level of storms would be three storms per year qualifying for Storm Fund recovery. D.P.U. 15-155, at 80. In this case, the Company has followed the Department's model setting three major events as the representative number of storms anticipated per year. The total of three storms was derived by the Department in D.P.U. 15-155 for National Grid based on its prior experience with major events. This is the same for Eversource, computed as 21 qualifying storms divided by 7 years, which is the number of years over which the qualifying storms occurred (see, Exhibit ES-DPH-2 (East) and Exhibit ES-DPH-2 (West), Schedule DPH-21, page 4.). Therefore, the Company is proposing that a total of $3.6 million be collected through base rates annually to cover the first $1.2 million deductible per storm ($1.2 million * 3 storms), also shown in Exhibit ES-DPH-2 (East) and Exhibit ES-DPH-2 (West), Schedule DPH-21, page 4 for NSTAR Electric and WMECO, respectively.

Q. How does the Company propose to allocate the $3.6 million base distribution amount from NSTAR Electric and WMECO customers?

A. The Company proposes to allocate the annual base distribution amount on an 80/20 basis to NSTAR Electric and WMECO customers, respectively. This split is determined by the ratio of NSTAR storm costs and WMECO storm costs to total net incremental storm costs from February 2010 through February 2016, as shown on Exhibit ES-DPH-2 (East) and Exhibit ES-DPH-2 (West), Schedule

DPH-21. This would mean that NSTAR Electric customers would pay $2.88 million annually, while WMECO customers would pay $720,000 annually through base distribution rates to cover the allocated share of the representative deductible amount. It is necessary to incorporate this level of expense into base distribution rates as a post-test year adjustment to expense because this amount is not currently reflected in base distribution rates for NSTAR Electric or WMECO.

C. Recovery of Outstanding Storm Cost Balance

Q. What is the current status of unrecovered storm costs for NSTAR Electric?

A. In D.P.U. 13-52 the Department approved the recovery of costs associated with two storms in 2011 over a period of 5 years (2014 through 2018) with interest the Prime rate.[4] As a result, NSTAR Electric is currently recovering approximately $8 million annually through the end of 2018.[5] Since 2011 the Company has incurred a total of $125 million for 10 storm events, as follows:[6]

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[4] Article II (8) of the AG-DOER Settlement allowed that storm costs incurred by NSTAR Electric in 2011 for Tropical Storm Irene and the October Snowstorm would be deferred at the prime rate and be recoverable in rates over a five-year period beginning January 1, 2014.

[5] See D.P.U. 16-172, Exhibit NSTAR-BKR-13.

[6] Costs represent total incremental storm costs. See D.P.U. 16-74, Exhibit EVER-LML-1-SUMMARY (Revised) for the 8 storms occurring in 2012 through 2015. See the Company's D.P.U./D.T.E. 96-23/D.T.E. 05-85 – Storm Fund Report filed with the Department on August 8, 2016 for storm fund accounting relating to the two storms in 2016. The Company is in the process of completing the compilation and review of invoices and other supporting documentation for these two storms.

Table DPH-1

Storm costs			
10/29/2012	HurricaneSandy	$	25,440,145
11/05/2012	November 2012 Nor'easter Blizzard		1,779,048
02/08/2013	Nemo		61,979,348
03/06/2013	March 2013 Snowstorm		1,567,417
02/15/2014	February 2014 Blizzard		2,452,977
07/03/2014	Tropical Storm Arthur		1,564,780
01/26/2015	Winter Storm Juno		15,510,061
02/14/2015	Winter Storm Neptune		3,319,270
02/05/2016	Winter Storm Lexi		6,719,554
02/08/2016	Winter Storm Mars		4,434,039
		$	124,766,641

This level of Storm Fund activity far exceeds the amount currently recovered in base rates for NSTAR Electric of $4.5 million. As a result, NSTAR Electric currently has a Storm Fund in a deficit (under-recovered) position of approximately $100 million.

Q. What is the current status of unrecovered storm costs for WMECO?

A. Since its last rate case D.P.U. 10-70, WMECO has had in place an SRRCA which allowed for recovery of $575,000 per year in base contributions to the WMECO Storm Reserve, plus recovery outside of base rates in the event that the WMECO Storm Reserve balance was in a deficit position for more than $3 million. As a result, WMECO has been recovering its major storm costs on a more “real-time” basis than has NSTAR Electric. WMECO currently has a rate in place that is recovering the storm costs for storms approved for recovery in D.P.U. 11-102, and D.P.U. 13-135, and for storm costs that are currently pending review before the Department in D.P.U. 15-149. WMECO is projecting that, assuming no additional storms and the level of recovery to continue at current levels, the outstanding costs for these storms will be fully recovered by December 31, 2019.

Q. What is the Company's proposal for recovering the unrecovered storm costs for NSTAR Electric and WMECO?

A. The Company is proposing that the Storm Fund operate on a consolidated basis for new storms occurring on and after January 1, 2018. For unrecovered storm costs for storms occurring prior to January 1, 2018, the Company is proposing to recover those costs separately as a unique rate for NSTAR Electric customers and WMECO customers, respectively. In other words, the Company is proposing to recover the unrecovered balance of NSTAR Electric storm costs as of December 31, 2017 (i.e., unrecovered storm costs for the 10 storms that have occurred to date, plus any that may occur during 2017 prior to new rates becoming effective in this proceeding) from NSTAR Electric customers

Similarly for WMECO, the Company is also proposing to recover the unrecovered balance of WMECO storm costs as of December 31, 2017 from WMECO customers.

Q. Please elaborate on the Company's proposal to recover the un-amortized balance of outstanding storm costs from NSTAR Electric customers.

A. As shown in Table DPH-2 above, NSTAR Electric has incurred $125 million of incremental O&M costs associated with 10 qualifying storm events between 2012 and 2016. These costs have been offset somewhat by recovery in base rates of $4.5 million annually, and so the existing Storm Fund balance for NSTAR Electric stands at a deficit of approximately $100 million as of June 30, 2016. Based on the current rate of storm-fund replenishment through base distribution rates it would take approximately 22 years to replenish the Storm Fund, assuming no additional storms. In addition to the storms that have occurred through 2016, additional storms may occur prior to January 1, 2018 when new rates take effect as a result of this proceeding. Therefore, due to the significant balance of unrecovered storm costs and the length of time since their incurrence, the Company is proposing to recover these costs over a period of 5 years starting January 1, 2018 with interest at the Prime rate from the date of the storm.

The total unrecovered outstanding storm costs for NSTAR Electric represents a significant unrecovered balance, and has been outstanding for a long period of time. The majority of the unrecovered storm balance is comprised of two storms occurring in 2012 and 2013. Assuming the Department approves recovery as proposed, the majority of storm costs would therefore take over 10 years to recover (2012 through 2022). As described previously, even by accruing interest at the Prime rate, the Company will not fully recover its true costs associated with these storms when factoring in the time value of money and the extended delay in recovery.

In addition, as described above, NSTAR Electric is currently recovering approximately $8 million annually toward these costs through the end of 2018. The Company proposes to continue to recover these costs at this level through 2018 in accordance with the terms of the AG-DOER Settlement Agreement, and the Department's Order in D.P.U. 13-52.

The Company has estimated the total annual revenue recovery associated with the outstanding storm balance to be approximately $31 million, as shown in Exhibit ES-DPH-5 (East). This amount is an estimate, subject to (1) the final determination of recoverable storm costs in D.P.U. 16-74, (2) the final determination of recoverable storm costs for the two storms yet-to-be filed, which occurred in 2016, and (3) any additional storms that may occur prior to new rates on January 1, 2018.

Q. Please elaborate on the Company's proposal to recover the un-amortized balance of storm costs for WMECO customers.

For WMECO, the Company is similarly proposing to recover the outstanding unrecovered storm balance from WMECO customers. WMECO currently has a rate mechanism in place, which is providing recovery of storm costs incurred to date. The Company is proposing to continue to recover these costs, as well as any other storms that occur prior to January 1, 2018 from WMECO customers. The Company projects that, if there are no new storms between now and December 31, 2017, and recovery is continued at current levels these costs will be fully recovered by the end of 2019. However, if additional significant storms occur in 2017, it may be necessary to extend recovery of the unrecovered balance as of December 31, 2017 over a longer period in order to mitigate bill impacts to customers. Therefore, the Company is requesting the Department authorize the Company to continue its recovery of WMECO's storm costs at the level currently being recovered through the SRRCA until the total outstanding balance of storm costs as of December 31, 2017 is fully recovered, unless such recovery would exceed five years. If that level of recovery (as a result of additional storms in 2017) would exceed five years due to the incurrence of additional storms prior to December 31, 2017, the Company would propose to recover the unrecovered balance over 5 years starting in 2018, consistent with the proposal for NSTAR Electric.

Q. What is the Company's proposal with regard to the balance of storm-related vegetation management costs attributable to Verizon?

A. As described in the testimony of Company Witness Vera L. Admore-Sakyi, the Company has worked diligently to obtain a resolution with Verizon regarding cost responsibility for vegetation-management work under the respective joint operating agreements ("JOA"). Verizon has steadfastly held that it does not have a need for the Company to perform vegetation management activities on its behalf, and that it will not agree to cost sharing. As part of this effort, the Company has engaged in extensive negotiations with Verizon as a result of the Department's decision in D.P.U. 13-52, and has issued invoices to Verizon for the cost of vegetation work associated with certain storm events that the Company attributed to Verizon.

Specifically, NSTAR Electric issued invoices to Verizon totaling $7.1 million and WMECO issued invoices totaling $1 million, which for NSTAR Electric represents 50 percent of the total storm-related vegetation management costs, and for WMECO, representing 50 percent of the cost incurred in locations where Verizon received a demonstrable benefit. The negotiations hit a final impasse in 2016 with Verizon's termination of one of its JOAs with NSTAR Electric and its steadfast refusal to bear any portion of these costs beyond the amount put forward by Verizon during settlement discussions. At the time of this filing, the Company continues to attempt to reach a mutually agreeable resolution. The Company is hopeful that it will be able to come to terms with Verizon early in this proceeding, which will result in Verizon sharing an appropriate level of storm-related vegetation management costs. However, it is clear from numerous discussions that Verizon will not agree to share the full amount of vegetation-management costs billed to Verizon to date. Therefore, assuming the Company is able to reach resolution, the Company anticipates including the remaining balance of unrecovered vegetation management attributable to Verizon in the amount of storm costs for both WMECO and NSTAR Electric to be recovered effective January 1, 2018.

16. INFLATION ADJUSTMENT

Q. Have you calculated inflation adjustments for the NSTAR Electric and WMECO revenue requirements?

A. Yes. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-22, the post-test year adjustment associated with the NSTAR Electric residual inflation adjustment is an increase of $3,070,102. The computation of NSTAR Electric's pro forma expense level is shown in Exhibit ES-DPH-3 (East), at WP DPH-22, page 1. As shown on Exhibit ES-DPH-2 (West), Schedule DPH-22 the post-test year adjustment associated with the WMECO residual inflation adjustment is an increase of $942,355. The computation of WMECO's pro forma expense level is shown in Exhibit ES-DPH-3 (West), WP DPH-22, page 1.

Consistent with Department precedent, Eversource has calculated an inflation allowance to recognize the expected changes in cost that will occur between the end of the test year and the midpoint of the rate year. Under Department precedent, the adjustment applies only to those expenses that are not adjusted separately (i.e., "residual O&M expense").

Q. Please describe the adjustment for inflation.

A. NSTAR Electric's inflation adjustment of $3,070,102 is shown on Exhibit ES-DPH-3 (East), WP-DPH-22, with the computation in relation to residual NSTAR Electric O&M expenses shown on the same exhibit. The inflation allowance is based on the projected inflation rate of 4.87 percent from the midpoint of the test year to the midpoint of the rate year. In order to determine the level of test year residual O&M expense, I reduced test year O&M expense by expenses that have been adjusted separately. The inflation rate was separately calculated in Exhibit ES-DPH-3 (East), WP DPH-22 and was measured by the projected growth in the Gross Domestic Product Implicit Price Deflator ("GDPIPD") from the mid-point of the test year to the mid-point of the rate year.

I calculated WMECO's inflation adjustment of $942,355 in the same manner as shown on Exhibit ES-DPH-3 (West), WP DPH-22.

17. Depreciation

Q. Did the Company prepare a depreciation study for this case?

A. Yes. Company Witness John J. Spanos prepared a detailed depreciation study for this general rate case for both NSTAR Electric and WMECO. The results of that study are incorporated into the proposed depreciation expense for each company.

Please see Mr. Spanos' direct testimony (Exhibit ES-JJS-1) for support of the updated depreciation rates.

Q. You mentioned the Company's plans to consolidate the corporate entities of WMECO and NSTAR Electric. How does this affect the Company's request related to depreciation rates in this proceeding?

A. As described in the testimony of Mr. Spanos, he has prepared a depreciation study for both NSTAR Electric and WMECO as individual entities. However, once the corporate consolidation of WMECO into NSTAR Electric is completed, the consolidated entity will require a single set of depreciation rates. Therefore, the Company is requesting the Department approve the weighted accrual rates as presented by Mr. Spanos as Exhibit ES-JJS-4. This authorization will enable the consolidated entity to implement the deprecation rates approved by the Department in this proceeding without requiring a separate proceeding.

Q. What level of depreciation is the Company proposing for its revenue requirements?

A. NSTAR Electric has calculated a pro forma depreciation expense of $152,153,130 at Exhibit ES-DPH-2 (East), Schedule DPH-23. This is a decrease of ($1,688,572) from the test year amount of $153,841,701.

WMECO has calculated a pro forma depreciation expense of $30,276,615 at Exhibit ES-DPH-2 (West), Schedule DPH-23. This is an increase of $4,476,913 from the test year amount of $25,799,702.

Q. Please describe in more detail the calculation of depreciation expense?

A. I have applied the depreciation rates resulting from the depreciation study performed by Mr. Spanos as of the test year ending June 30, 2016 to account balances of depreciable plant, including the post-test year plant additions for major capital projects to determine depreciation expense for each utility plant account. As described in Mr. Spanos' testimony and his accompanying exhibits, the depreciation rates proposed for NSTAR Electric represent a net decrease versus current levels. This is mostly driven by a decrease in amortization expense on intangible assets, which is a result of the utilization of longer amortization periods than are currently utilized, and a decrease in depreciation expense on distribution plant. This is primarily due to the results of Mr. Spanos analysis, which indicates many accounts have longer service lives than are reflected in current rates. For WMECO, the increase in depreciation expense is primarily due to higher negative net salvage amounts for certain distribution plant accounts. Please refer to the testimony and supporting exhibits provided by Mr. Spanos in this proceeding for a full account and explanation of the changes in the proposed levels of depreciation and amortization expense.

Exhibit ES-DPH-3 (East), WP DPH-28 provides a listing of the depreciable plant balances by account as of June 30, 2016. Columns (D) through (O) present adjustments to remove non-distribution related and to add post-test year additions for major capital projects to be placed into service during this proceeding, to arrive at the distribution plant in service in Column (P). In Exhibit ES-DPH-3 (East), WP DPH-23, I have applied the depreciation accrual rates for NSTAR Electric as presented in Exhibit ES-JJS-2 at VI.4 to the distribution plant in service balance presented in Exhibit ES-DPH-3 (East), WP DPH-28, Column (P). The calculated depreciation expense is the sum of the depreciation expense for each utility plant account. This total of $152,153,130 is shown on Exhibit ES-DPH-3 (East), WP DPH-23.

The calculation for WMECO follows the same logic. The distribution plant in service, including adjustments to remove non-distribution related accounts and a significant project to be placed in service during this proceeding is presented in Exhibit ES-DPH-3 (West), WP DPH-28, Column (P). In Exhibit ES-DPH-3 (West), WP-DPH-23, I have applied the depreciation accrual rates for WMECO as presented in Exhibit ES-JJS-3 at VI.4 to the distribution plant in service balance for WMECO. The calculated depreciation expense is the sum of the depreciation expense for each utility plant account. This total of $30,276,615 is shown on Exhibit ES-DPH-3 (West), WP DPH-23.

18. Amortization of Deferred Assets

Q. Have you adjusted the test year amortization expense?

A. Yes. Exhibit ES-DPH-2 (East), Schedule DPH-24, shows a net increase to distribution related amortization expense of $6,453,570. The detail supporting this adjustment is provided in the schedules accompanying the workpaper provided in Exhibit DPH-3 (East), WP DPH-24.

Exhibit ES-DPH-2 (West), Schedule DPH-24 shows a net increase to distribution related amortization expense of $1,330,553. The detail supporting this adjustment is provided in the schedules accompanying the workpaper provided at Exhibit DPH-3 (West), WP DPH-24.

Q. Please provide a summary of the information contained in Exhibit ES-DPH-2 (East), Schedule DPH-24 and Exhibit ES-DPH-2 (West), Schedule 2.

A. Exhibit ES-DPH-2 (East), Schedule DPH-24, identifies three amortization items for inclusion in the distribution cost of service. The items subject to amortization are (a) Acquisition Premium Amortization; (b) Hardship Receivables; and (c) Merger Costs to Achieve. WMECO's corresponding schedule for amortization items is Exhibit ES-DPH-2 (West), Schedule DPH-24 and includes adjustments relating to (a) Hardship Receivables; (b) Merger Costs to Achieve; and (c) Property Sales.

A. Acquisition Premium Regulatory Asset

Q. What is the acquisition premium regulatory asset amortization?

A. The annual pro forma amortization relating to the acquisition premium is $17,590,044, as shown at Exhibit ES-DPH-2 (East), Schedule DPH-24 and the accompanying workpaper in Exhibit ES-DPH-3 (East), WP DPH-24, page 4. The amortization of merger-related acquisition premium was approved by the Department in BECO/COM Acquisition, D.T.E. 99-19 (1999). In that case, the Department approved the 40-year amortization and recovery of the merger-related acquisition premium with the annual amortization estimated at $20.6 million on a tax-effected, NSTAR-wide basis. D.T.E. 99-19, at 6-7, 46-47, 56-62, 81-86.

Q. Please further describe the treatment of the acquisition premium approved by the Department in BECO/COM Acquisition, D.T.E. 99-19 (1999)?

A. In D.T.E. 99-19, the Department approved a rate plan associated with the merger of BEC Energy and Commonwealth Energy Systems (the "BECO/COM Merger"), applying to the operating subsidiaries of Boston Edison Company, Cambridge Electric Company, Commonwealth Electric Company and Commonwealth Gas Company. These operating subsidiaries were legally merged together in 2006 to become NSTAR Electric as a result of the Department's decision in NSTAR Electric Company, D.T.E. 06-40 (2006).

In D.T.E. 99-19, the Department approved the 40-year amortization and recovery of an acquisition premium associated with the BEC/COM Merger estimated at that time to be $500,059,252, noting that the final acquisition premium amount would not be determined until after the merger. Id. at 6-7, 46-47, 56-62, 81-86. Based on this determination, the Department directed the NSTAR to: (1) provide the journal entries or a schedule summarizing such entries upon completion of the merger in order to determine the actual acquisition premium; and (2) develop a cost allocation system for transactions among the four operating subsidiaries, including the allocation of the acquisition premium. Id. at 62, 91-94. On April 2, 2001, NSTAR submitted a final accounting for the merger to the Department, quantifying the actual acquisition premium as $490,023,438. The actual acquisition premium balance determined as of the merger-closing date of $490,023,438 was allocated to the operating companies of NSTAR. The Department approved the amortization and recovery from customers of the acquisition premium balance because the savings as a result of the merger were found to be significantly greater than the costs incurred to achieve the merger, including the acquisition premium.

Q. How was the allocation of the acquisition premium determined?

A. In 1999, the Company allocated the acquisition premium balance among the operating affiliates based on the relative size of the companies' operations. In order to determine the allocation, the Company calculated an allocator based on the combination of net utility plant and distribution O&M expenses. The resulting allocator for NSTAR Electric was 85.86 percent. Of the $490 million acquisition premium amount, approximately $420.7 million was allocated to NSTAR Electric.

Q. What was Department's finding in the NSTAR Gas rate case proceeding in D.P.U. 14-150 relating to the valuation of ComEnergy Steam?

A. In the Department's Order in D.P.U. 14-150 at 232 it stated the following:

> The Department has reviewed the Company's calculation of the remaining amortization amount related to the D.T.E. 99-19 acquisition premium. Based on our review, the Department finds that the basis adjustment does not include all of ComEnergy's unregulated affiliates. Specifically, the revaluations are confined to Advanced Energy Systems, a combined heat and power facility, and four real estate companies. At the time of the merger, however, ComEnergy also operated ComEnergy Steam, which provided steam service in the City of Cambridge. The Department questions the Company's implicit assumption that ComEnergy Steam had no market value as of the date of the merger. While the Department will not adjust the Company's calculation of its basis adjustment here, we put NSTAR Gas on notice that this calculation will be the subject of inquiry in the Company's next base rate proceeding.

D.P.U. 14-150, at 232 (citations omitted).

Q. Do you agree with the Department's conclusion that in the revaluation of ComEnergy's unregulated subsidiaries, NSTAR determined that ComEnergy Steam, which was operated by ComEnergy and provided steam service to the City of Cambridge, had no market value?

A. No, this is not correct. The Department has misinterpreted the referenced document originally provided in D.P.U. 14-150 as Exhibit AG-6-25, Att. (c) at 5. This document shows basis adjustments to various entities included in the consolidated COM/Energy common equity balance. In other words, amounts shown on the referenced exhibit indicates that, for purposes of determining the acquisition premium, the book value of certain entities was adjusted, as shown on that schedule. The absence of ComEnergy Steam on that exhibit does not, as the Department has concluded, reflect the view that ComEnergy Steam had "no market value as of the date of the merger."

Instead, the absence of ComEnergy Steam on that referenced exhibit simply means that the Company *made no adjustment* to its book value in determining the acquisition premium. In fact, at that time there were other affiliated entities operated by ComEnergy that were also not referenced on that exhibit, including Hopkinton LNG Corp. Exhibit ES-DPH-4, Schedule DPH-9 at page 4 provides the document originally provided in D.P.U. 14-150 as Exhibit AG-6-25(c), which illustrates the original calculation of the estimated acquisition premium balance immediately following the merger in August 1999. This calculation was filed with the Department on November 23, 1999 as required in the decision. Exhibit

ES-DPH-4, Schedule DPH-9 at page 16 provides a memo prepared at the time of the merger in 1999, which documents the rationale for each basis adjustment listed on Exhibit ES-DPH-4, Schedule 9 at 8, as well as the rationale for *basis adjustments not made*, including any impact on ComEnergy Steam.

Q. In calculating the amount of the acquisition premium to be amortized, did NSTAR include costs related to change in control provisions contained in then-existing employment contracts in the calculation?

A. Yes, NSTAR included the costs of certain change in control provisions, as was explicitly anticipated by the Department's decision in D.T.E. 99-19. As part of this calculation, NSTAR included the amount $5,992,297 representing actual costs incurred as part of the merger transaction for employment contracts that COM/Energy had in place with three of its officers prior to the merger. These pre-existing employment contracts were part of the business acquired and represented known and anticipated costs associated with the change-in-control provisions included in certain COM/Energy employment contracts that were in existence at the time of the merger. The actual payments to the departing executives equaled $5,861,107, representing a difference of less than two percent from the amount anticipated in the computation of acquisition premium consistent with applicable accounting standards.

Q. Are costs associated with employment contract change in control provisions properly included in a goodwill calculation?

A. Yes. The BECO/COM Merger, as reviewed and approved by both the Department and FERC, was governed by Accounting Principles Board Opinion No. 16, Business Combinations ("APB 16"), issued in August of 1970, and Statement of Financial Accounting Standards No. 38, "Accounting for Pre-Acquisition Contingencies of Purchased Enterprises" ("SFAS 38"), issued in September of 1980. Both SFAS No. 38 and APB 16 provide for the inclusion of "change in control payments" in the goodwill computation.

APB 16, paragraph 11, describes the purchase method of accounting for a business combination and states that "…. [t]he acquiring corporation records at its cost the acquired assets less liabilities assumed. A difference between the cost of an acquired company and the sum of the fair values of tangible and identifiable intangible assets less liabilities is recorded as goodwill." APB 16 further indicates in paragraph 21.a. that a company should record in an acquisition "all assets and liabilities which comprise the bargained cost of an acquired company, not merely those items previously shown in the financial statements of an acquired company." The change-in-control payments made to certain, former COM/Energy personnel resulted from employment contracts that were part of COM/Energy upon acquisition. The costs of those contracts were triggered by the merger transaction, and therefore, were properly (and unavoidably) part of the purchase price of COM/Energy. The departure of those executives resulted in future savings for customers. Attached as Exhibit ES-DPH-4, Schedule DPH-9, page 20 is support for the costs of those contracts.

Q. How was the amortization period determined?

A. The amortization period is based on the accounting standards in effect at the time of the merger. At that time, entities were required to amortize goodwill over the estimated economic period of the goodwill balance, not to exceed 40 years. In D.T.E. 99-19, the Company proposed, and the Department approved, a straight line 40-year amortization period. This reflects the fact that the customer savings are realized over an extended period of time.

Q. How is the tax impact of the amortization treated for purposes of the revenue requirement?

A. The amortization is not deductible for federal or Massachusetts income tax purposes. Therefore, the revenue requirement related to the acquisition premium amortization must contain a gross-up to ensure that the Company is able to collect the income tax liability as a result of the billed revenue. By doing this, the revenue requirement calculation reflects the appropriate tax treatment of the amortization.

B. Amortization of Hardship Accounts Arrearage Balances

Q. What is the amortization of hardship receivables?

A. In addition to the normal level of accounts receivable charge-offs, I have included an amount for the recovery of uncollectible amounts associated with "hardship protected accounts." Hardship protected accounts are residential accounts that are protected from shut-off by the utility for non-payment under 220 C.M.R. §§ 25.03, 25.05. To qualify for protected status from service termination, customers must be elderly or demonstrate that they have a financial hardship and meet certain other requirements, such as suffering from a serious illness or residing with a child under twelve months of age (220 C.M.R. § 25.03(1); 220 C.M.R. § 25.03(3); 220 C.M.R. § 25.05(3)). All qualified accounts are protected from shut-off for non-payment year round, except for heating customers with a financial hardship. These heating accounts are protected from shut-off for non-payment only during the winter moratorium period, November 15th through March 15th (220 C.M.R. §§ 25.03(1)(a)3, 25.03(1)(b)).

Pursuant to Department regulations, an account qualifies for protected status where the customer has a financial hardship, and: (1) a person residing in the household is seriously ill; (2) a child under the age of twelve months resides in the household; (3) the customer takes heating service between the period November 15th and March 15th; or (4) all adults residing in the household are age 65 or older and a minor child resides in the household (220 C.M.R. § 25.03). An account also qualifies for protected status where all residents of the household are age 65 or older (220 C.M.R. § 25.05). Customers who meet the income eligibility requirements for the Federal Low-Income Home Energy Assistance Program ("LIHEAP") are deemed to have a financial hardship (220 C.M.R. § 25.01(2)).

Because these accounts cannot be disconnected, the accounts remain "active" and continue to receive service despite slow or non-payment of amounts due. As the accounts stay active, they do not become part of the write-off calculation to be included for recovery from customers. NSTAR Electric's total "active protected" hardship accounts receivable balance outstanding over 360 days is $19,162,406 as of June 30, 2016 as shown in Exhibit ES-DPH-3 (East), WP DPH-24, page 2. The Company is proposing to amortize NSTAR Electric's balance of "active protected" receivables over a five-year period. The resulting annual amortization expense of $3,832,481 is shown on Exhibit ES-DPH-2 (East), Schedule DPH-24.

WMECO's total "active protected" hardship accounts receivable balance outstanding over 360 days is $4,337,928 as of June 30, 2016 as shown in Exhibit ES-DPH-3 (West), WP DPH-24, page 2. The Company is similarly proposing to amortize this balance over a five-year period. The resulting annual amortization expense of $867,586 is shown on Exhibit ES-DPH-2 (West), Schedule DPH-24. A similar adjustment was first approved by the Department for WMECO in its last rate case proceeding in D.P.U. 10-70, as described below. Therefore, the amount outstanding over 360 days for WMECO excludes accounts that were included in the amount approved by the Department in that prior proceeding in order to avoid a double recovery of costs.

Q. Could you provide additional detail on the Company's proposed amortization of "hardship receivables"?

A. Yes. If an active hardship protected customer's account balance is in arrears, the Company is prohibited from initiating the procedures it would normally follow to collect the balance and, if necessary, to terminate service to the customer. As a result of the Department's requirements and practices in relation to this customer group, the active hardship protected customer accounts receivable balances in arrears have grown significantly. The table below provides a breakdown of the active hardship protected balances as of June 30, 2016 for NSTAR Electric and WMECO:

Table DPH-2

Age of Accounts	NSTAR Electric $ Balance	WMECO $ Balance
0 to 30 days	$ 843,589	$ 368,190
30 to 60 days	$ 745,505	$ 303,468
61 to 90 days	$ 812,870	$ 345,175
91 to 120 days	$ 832,751	$ 408,150
121 to 360 days	$ 5,171,358	$ 2,613,947
Over 360 days	$ 19,162,406	$ 4,337,928

Q. Is this request consistent with Department precedent?

A. Yes. In Western Massachusetts Electric Company, D.P.U. 10-70 (2011), the Department approved the company's request to amortize arrearage balances for active hardship accounts over 120 days. D.P.U. 10-70, at 214-216. However, in that decision, the Department stated that it was appropriate for WMECO to amortize outstanding balances over 360 days (versus 120 days) over a five-year amortization period. Id. at 216. In addition, the Department directed that any payments made by customers toward balances that WMECO has amortized would be credited to WMECO's Residential Assistance Adjustment Clause. Id.

In Fitchburg Gas and Electric Light Company, D.P.U. 13-90, at 158-160, 163-167 (2014), the Department affirmed the treatment of allowing a five-year amortization of arrearage balances for active hardship over 360 days. This adjustment has also been approved by the Department for NSTAR Gas in D.P.U. 14-150, at 235, and National Grid in D.P.U. 15-155 at 252.

Q. Is the Company currently able to collect arrearages related to active hardship protected customer accounts?

A. No. Arrearages are recoverable only to a very limited extent. The Company currently has a Residential Assistance Adjustment Factor ("RAAF") for both NSTAR Electric and WMECO, which is a recovery mechanism for arrearage forgiveness that is provided to customers who participate in the Company's NewStart program**.** A customer must enroll and stay in the NewStart program for his/her unpaid balance to qualify for recovery in the RAAF. A limited number of the Company's customers who qualify for protected status participate in the NewStart Program, but the majority of active hardship-protected customers do not participate or are unable to remain in the program for various reasons, including failure to meet the minimum required payments. As a result, arrearages related to active hardship protected accounts continue to grow and the Company has no mechanism to recover them.

C. <u>Amortization of Merger-Related Costs to Achieve</u>

Q. What is the amortization of merger-related costs to achieve?

A. The annual pro forma amortization for merger-related costs to achieve is $2,621,089 for NSTAR Electric and $442,169 for WMECO, as shown on Exhibit

ES-DPH-2 (East), Schedule DPH-24 and Exhibit ES-DPH-2 (West), Schedule DPH-24, respectively. This represents each company's share of merger costs amortized over a ten-year period. As explained below, the Company is including NSTAR Electric and WMECO's portion of merger costs as an amortization in each company's respective cost of service in accordance with the terms of the merger settlement agreements between Northeast Utilities, the Office of the Attorney General and the DOER.

Q. Please describe the merger transaction between Northeast Utilities and NSTAR.

A. Northeast Utilities and NSTAR entered into an agreement and plan of merger dated October 16, 2010, as amended on November 1, 2010. The transaction was approved by the Department on April 4, 2012 in D.P.U. 10-170-B, and closed on April 10, 2012. Upon completion of the merger, NSTAR and its subsidiaries, including NSTAR Gas and NSTAR Electric, became wholly-owned subsidiaries of Northeast Utilities. Effective February 2, 2015, Northeast Utilities and all of its subsidiaries began doing business as Eversource Energy.

Q. Did the Department's order approving the merger include terms and conditions from two settlement agreements?

A. Yes. The Department approved the merger transaction in D.P.U. 10-170 subject to the terms and conditions of the AG-DOER Settlement Agreement and a second settlement between Northeast Utilities and the DOER (the "DOER Settlement Agreement").

Q. Did the AG-DOER Settlement Agreement include a provision for the reporting of merger-related savings following the merger transaction?

A. Yes. Article II (15) of the AG-DOER Settlement Agreement requires interim reports on merger integration efforts, with filings made on January 1, 2014 and January 1, 2015 (and each January 1 thereafter until a base-rate proceeding is conducted). The interim merger integration reports are designed to provide information on the previous calendar year's merger integration efforts organized by functional area, including information on merger-related costs incurred, any savings attributable to merger integration efforts and the effects of the integration efforts on the operating companies. Article II (15) also requires a final merger integration report to be filed at least 60 days prior to the filing of the first base-rate proceeding following the base rate freeze period by NSTAR Gas, NSTAR Electric or WMECO.

Q. Did the Company file a merger-integration report in accordance with this requirement?

A. Yes. On November 15, 2016, in D.P.U. 10-170, the Company submitted the 2016 Annual Interim Report on Merger Integration (the "2016 Merger Report") to the Attorney General's Office, the DOER and the Department. With the 2016 Merger Report, the Company advised the Department that it expected to file a petition with the Department for a change in base rates under G.L. c. 164, § 94, on or before January 17, 2017.

The 2016 Merger Report presented: (1) actual merger-related costs for 2010 through 2015; (2) actual merger-related savings through September 30, 2016; and (3) merger-related savings forecast for the period October 2016 through the first quarter of 2022, consistent with the 10-year post-merger savings timeframe projected in the Net Benefit Study. A copy of the 2016 Merger Report is included in Exhibit ES-DPH-4, Schedule DPH-10.

Q. What did the 2016 Merger Report show with respect to merger-related savings, costs and net benefits?

A. The 2016 Merger Report showed that Eversource is projecting to exceed the net benefits forecast developed for the Net Benefits Study in D.P.U. 10-170. Specifically, the Net Benefits Study estimated net merger-related savings for the ten years following the merger to be $784 million on an enterprise-wide basis. The 2016 Merger Report shows that the cumulative net savings projection is currently calculated to be $1,032.4 million over the 10-year period following the merger, 2012 through 2022. The projected savings of $1,032.4 million are net of $125.9 million of merger-related costs (see Exhibit ES-DPH-4, Schedule DPH-10, page 9). A total of $46 million of expected savings was paid Eversource Energy's customers up front so that they would realize some of the tangible benefits of the merger upon the closing. This payment included a total of $15 million in merger savings was paid out directly to NSTAR Electric customers and $3 million in merger savings paid out directly to WMECO customers.

Q. What is the proportional share of merger savings attributable to NSTAR Electric and WMECO?

A. The proportional share of total merger-related net savings attributable to NSTAR Electric and WMECO is $274 million and $46 million over the 10-year period 2012 through 2022, respectively. This is approximately 27 percent of the total amount of $1,032.4 million for NSTAR Electric and four percent of the total for WMECO[7]. Based on the calculated estimated savings documented in the merger integration report, the share of cumulative overall, enterprise-wide savings achieved through December 31, 2015 is computed as approximately $69 million for NSTAR Electric and $11 million for WMECO, as shown in Exhibit ES-DPH-4, Schedule DPH-10, page 55. A summary of the proportionate share of merger related savings and costs is provided below in Table DPH-3.

[7] Exhibit ES-DPH-4, Schedule DPH-10, page 54.

Table DPH-3

Merger Related Savings and Costs Summary
$ million

	NSTAR Electric	WMECO	Total Eversource MA	Exh. DPH-4 Reference
Total merger savings (2012 - 2022)	$ 274.2	$ 45.5	$ 319.7	Sch. DPH-10, page 54
Annualized savings embedded in test year	$ 27.3	$ 4.5	$ 31.9	Sch. DPH-10, page 56
Annualization of costs (10 year amortization)	$ 2.6	$ 0.4	$ 3.1	Sch. DPH-10, page 54, 10 year amortization

Q. Did the AG-DOER Settlement Agreement include provisions for amortization and recovery of merger-related costs?

A. Yes. As an initial matter, Article II (15) of the AG-DOER Settlement Agreement required a compliance filing of actual transaction costs by account within 90 days of closing of the merger. A copy of the transaction-cost compliance filing in D.P.U. 10-170 is provided with my testimony as Exhibit ES-DPH-4, Schedule DPH-10, page 57.[8]

Second, Article II (14) states that, subject to Department review and approval, "transaction and reasonable integration costs from the Proposed Merger shall be eligible for recovery in a future distribution rate proceeding through the retention of merger-related synergies to the extent that merger-related savings are demonstrated to equal or exceed those costs." The AG-DOER Settlement

[8] The transaction costs reported in Exhibit ES-DPH-4, Schedule DPH-10, page 57 contain a subset of total merger costs. In addition, the merger compliance report attached to this testimony as Exhibit ES-DPH-4, Schedule DPH-10, page 2 reflects updates to 2012 merger costs.

Agreement also excludes from recovery a limited category of employee- and officer-related costs, such as change of control and retention payments.

Q. Is the Company requesting recovery of merger-related costs in this proceeding?

A. Yes. Consistent with the terms of the AG-DOER Settlement Agreement, the Company is proposing to amortize NSTAR Electric and WMECO's share of the 2010–2015 merger-related costs over 10 years, in the same manner approved previously by the Department for NSTAR Gas in D.P.U. 14-150. Based on merger-related costs from 2010 to 2015 of $125.9 million, NSTAR Electric's share is equal to $26.2 million, or approximately 20.81 percent of total costs, and WMECO's share is equal to $4.4 million, or approximately 3.51 percent of total costs. This equates to an annual amortization amount of $2,621,089 and $442,096 for NSTAR Electric and WMECO, respectively. The 2010-2015 merger-related costs are shown on Exhibit ES-DPH-4, Schedule DPH-10, page 52; and the cost allocation to each company is shown in Exhibit ES-DPH-3 (East), WP DPH-24 and Exhibit ES-DPH-3 (West), WP DPH-24 for NSTAR Electric and WMECO, respectively.

Q. Is the Company's share of expected merger-related savings equal to or greater than its share of costs?

A. Yes. As shown on Exhibit ES-DPH-4, Schedule DPH-10, page 56, NSTAR Electric's allocated share of enterprise-wide savings per the merger savings report is approximately $27 million, or approximately 26 percent of the total enterprise savings shown for the year ending December 31, 2015. Similarly, WMECO's allocated shared of enterprise-wide savings is approximately $4.5 million, or approximately 4 percent of the total enterprise savings shown for the year ending December 31, 2015. In addition, NSTAR Electric customers already received $15 million and WMECO customers received $3 million in the form of an upfront payment following the merger close. The test year merger savings attributable to NSTAR Electric and WMECO customers are in the areas of labor; administrative & general overhead; advertising; employee benefits; insurance; contract services; professional services; dues and fees; and materials and supply procurement. As a result, merger savings provided to customers through the end of the test year exceed the Company's share of merger-related costs, and therefore, the Company has qualified to recover its merger-related costs of approximately $26.2 million for NSTAR Electric and $4.4 million for WMECO through a 10-year amortization, or approximately $2.6 million per year and $0.4 million per year, respectively.

D. Sale of WMECO Property

Q. Have you included the amortization of gains and losses on the sale of property in the revenue requirement for WMECO?

A. Yes. Exhibit ES-DPH-2 (West), Schedule DPH-23 shows an increase in the revenue requirement of $20,799. The detail on the calculation is provided at Exhibit ES-DPH-3 (West), WP DPH-24, page 4. The sale of property amortization adjustment relates to gains and losses on the sale of three parcels of property, which resulted in a total loss of $103,995. I am proposing that this amount be amortized over a 5-year period for an annual increase to the revenue requirement of $20,799 for WMECO. A similar adjustment is not included for NSTAR Electric because NSTAR Electric has historically returned or recovered the gains or losses on sales of property through the Transition charge.

Q. Would you please describe the three property transactions?

A. The first transaction was the sale on June 6, 2014 of a 0.28 acre parcel of land (reserving an easement) on Linwood Street in Greenfield, MA to Norman K. Parker, Jr., an abutter. The sale of this parcel resulted in proceeds of $5,000 to WMECO. After subtracting the book value of the land and costs incurred related to the sale transaction, the Company realized a loss of ($10,083).

The second transaction was the sale on April 3, 2015 of a total of 0.83 acres of land (reserving easements) and building on Bromley Hill Road, Huntington, MA to the Town of Huntington. The sale of this parcel resulted in proceeds of $50,000. After subtracting the book value of the land and costs incurred related to the sale transaction, the Company realized a loss of ($140,311).

The third transaction was the sale on June 1, 2015 of a total of 16.43 acres of land (retaining easements) and equipment on Columbia Street, Chicopee, MA to the City of Chicopee Municipal Lighting Plant. The sale of this parcel and equipment resulted in proceeds of $369,500. After subtracting the book value of the land and costs incurred related to the sale transaction, the Company realized a gain of $46,399.

19. TAXES OTHER THAN INCOME TAXES

Q. Please summarize your adjustments to Taxes Other Than Income Taxes?

A. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-6, page 1 at line 70, NSTAR Electric is proposing to increase Taxes Other Than Income Tax by $2,452,314. As shown on Exhibit ES-DPH-2 (West), Schedule DPH-6, page 1 at line 68, WMECO is proposing to increase Taxes Other Than Income Tax by $1,641,152.

A. <u>Property Tax Expense</u>

Q. Has the Company adjusted the test year expense for property taxes?

A. Yes. The Company has adjusted test year property taxes as shown on Exhibit ES-DPH-2 (East), Schedule DPH-25 by $1,794,489 for NSTAR Electric and

$1,528,602 for WMECO, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-25.

Q. How did you determine this adjustment?

A. The adjustment to property tax expense is computed on Exhibit ES-DPH-2 (East), Schedule DPH-25 and Exhibit ES-DPH-2 (West), Schedule DPH-25 for NSTAR Electric and WMECO respectively. The known and measurable adjustment reflected on page 1 begins with the adjusted test year distribution property tax expense, which has been adjusted to remove non-distribution related property tax expense and out-of-period items, as shown on page 2. The total property tax expense is reflected on Schedule DPH-25, page 2, line 19. This amount is itemized by municipality on Exhibit ES-DPH-3 (East), WP-DPH-25 for NSTAR Electric and Exhibit ES-DPH-3 (West), WP-DPH-25 for WMECO. The total property tax expense is then adjusted to remove non-distribution related components to arrive at the distribution rate-year property tax expense shown on Schedule DPH-25, page 1, line 21 for NSTAR Electric and WMECO. Following these references above, for NSTAR Electric, the adjusted test year distribution-related property tax expense is $87,288,884 and the rate-year distribution-related property tax expense is $89,083,373, representing an increase of $1,794,489 to the adjusted test year expense, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-25, page 1.

For WMECO, the adjusted test year distribution-related property tax expense is $14,965,006 and the rate-year distribution-related property tax expense is $16,493,608, representing an increase of $1,528,602 to the adjusted test year expense, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-25, page 1.

This adjustment will be updated during the course of the case to reflect the most recent mill rates, personal property values from the latest "Form of List" ("FOL") and real estate assessments from the municipalities in which the Company owns assets, as described in more detail below.

Q. What is the Department's precedent for establishing the base level of property taxes in a distribution rate case?

A. The Department's general policy is to base pro forma level of property taxes that should be included in the revenue requirement on the most recent property tax bills from municipalities in which it has property. See, e.g., D.P.U. 15-155, at 213; D.P.U. 15-80/D.P.U. 15-81, at 166; D.P.U. 14-150, at 209; D.P.U. 12-25, at 330; D.P.U. 08-35, at 150; D.P.U. 96-50 (Phase I) at 108-109; Colonial Gas Company, D.P.U. 84-94, at 19 (1984).

However, as of the time of this filing, the latest property tax bills for NSTAR Electric and WMECO were received in the first half of 2016 and are for Fiscal

Year ("FY") 2016.[9] Due to the manner in which municipalities prepare their property tax bills, the personal property portion of these bills are based on the net book value of property **as of December 31, 2014** as reported to the municipalities by the Company. This lag in the plant balances, combined with the Department's 10-month suspension period, results in a substantial under-estimation of property tax expense in future periods, following the rate case. Therefore, the Company is proposing that the Department consider a new methodology for setting representative property tax expense. As explained below, this methodology closely follows the municipal tax process, and therefore, generates a more reliable representation of rate-year property tax expense.

Q. What are the various components of property tax expense issued by the municipalities to the Company?

A. The various components of each property tax bill are itemized on Exhibit ES-DPH-3 (East), WP-DPH-25 for NSTAR Electric and Exhibit ES-DPH-3 (West), WP-DPH-25 for WMECO. Copies of the latest actual property tax bills for NSTAR Electric are provided at Exhibit ES-DPH-7 (East), Schedule DPH-9, and for WMECO at Exhibit ES-DPH-7 (West), Schedule DPH-9. As shown on those schedules, the property tax bills are comprised of the following components:

[9] Fiscal year 2016 is for the twelve months ending June 30, 2016.

- **Personal Property Assessment**: This is based on the net book value of Company-owned assets reported to the municipality on the FOL annually. There are a limited number of municipalities who rely on an alternative, hybrid valuation methodology, and therefore do not rely on the FOL in determining the personal property assessment.

- **Real Property Assessment**: This is based upon the full and fair market value of all real estate established by the municipalities as of January 1st of each year. The fair market value (or the assessment) becomes the basis for taxation.

- **Mill Rate**: All municipalities establish the mill rate, which represents the amount per $1,000 of the assessed value of property. This rate is used to calculate the amount of property tax owed.

- **Total Tax**: Total Tax is the calculation of total assessed value (Personal Property plus Real Property) multiplied by the mill rate, and then divided by 1,000.

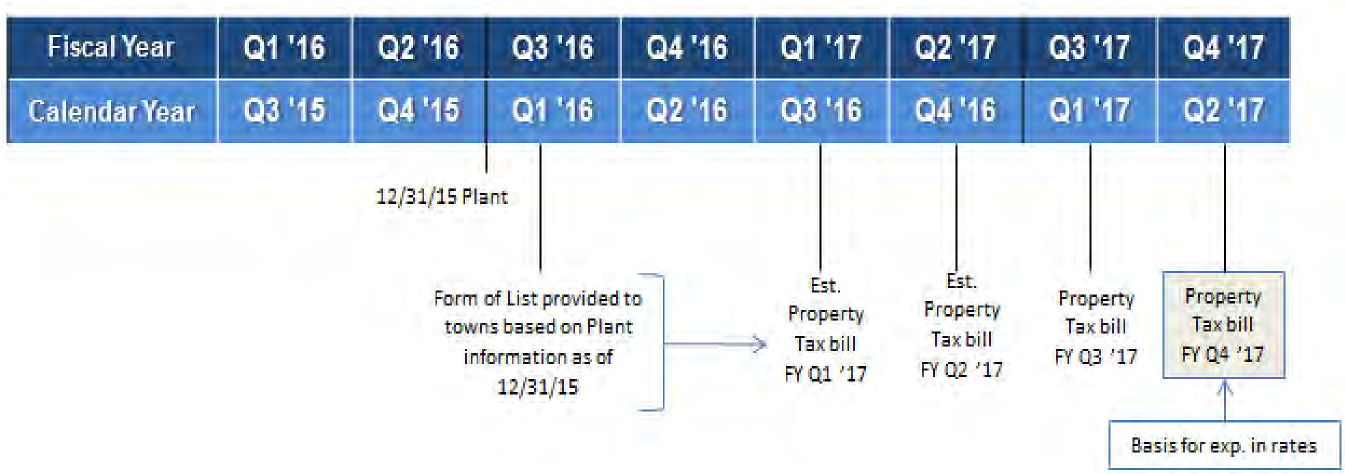
- **Community Preservation Act (“CPA”)**: CPA allows communities to create a local community preservation fund for open space protection, historic preservation, affordable housing and outdoor recreation. Community preservation monies are raised locally through the imposition of a surcharge of not more than three percent of the tax levy against real property, and municipalities must adopt CPA by ballot referendum.[10]

- **Water/Sewer:** Certain municipalities include surcharges for water and/or sewer system usage on their property tax bill.

Q. Please describe the typical process and timing for municipalities issuing property tax bills in a given year.

A. Please refer to Figure 1 below for a timeline of how property tax bills are generated by the municipalities. This illustrative example is based on a FY 2017 bill.

Figure 1



In the first quarter of each calendar year the Company produces a "Form of List," for submittal to each municipality in which the Company owns property. The

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[10] http://www.communitypreservation.org/content/cpa-overview

FOL reports the net book value of assets owned by the Company as of the end of the most recent calendar year. With few exceptions, municipalities rely on the FOL to bill the Company for personal property taxes. However, as shown in Figure 1, above, there is a substantial lag (as long as 18 months) from the point when the calendar year ends and the associated net-book value information is included on the property tax bills. This means that the most recent bills in the Company's possession at the time of this filing (received in the first half of 2016) reflect the net book value of plant in service **as of December 31, 2014**.

Carrying this forward, based on the anticipated timing of the proceeding in this case, the latest bills received by the Company during this proceeding will be received in during the first half of 2017, and will be based on net book value **as of December 31, 2015.** This means that, at the mid-point of the rate year, July 1, 2018, adhering strictly to the Department's historic methodology for establishing property tax expense, the Company will be recovering a level of property tax expense based on a net-book value of plant, which is at least 30 months old, i.e., the property tax expense recovered in rates as of July 2018 will be based on net book value as of December 31, 2015.

Given that the Company is consistently increasing its plant in service and that municipalities routinely incorporate increases in their mill rates, a lag time of two and a half years as of the mid-point of the rate year is significantly underestimating property tax expense right out of the box, and does not accurately establish a "representative" level of expense. Moreover, this situation is exacerbated by the fact that some municipalities have adopted a new valuation method that results in substantial increases in property tax expense. These factors have compelled electric and gas utilities to repeatedly request that the Department address this situation. In this case, the Company is proposing the use of a new methodology to more accurately establish the representative property tax expense based on the latest information available.

Q. What is the Company's proposal for establishing the level of property tax expense in this proceeding?

A. Consistent with Department precedent, the Company is proposing to base the property tax expense on the latest bills received by the Company during the proceeding.

For those municipalities who rely on the FOL provided by the Company, personal property tax expense will be based on the values provided by the Company on the FOL produced in the first quarter of 2017. The remaining components for each municipality (i.e., Real Property; Mill Rate; CPA; and Water/Sewer) will be based on the corresponding amounts listed by each municipality on the latest bills received during the proceeding. This is appropriate because the values provided on the FOL, in almost all cases, are identical to the values relied on by the municipality in valuing personal property on which to assess property tax expense.

For municipalities relying on an alternative, hybrid method for establishing the personal property assessment (the reproduction costs new less depreciation method, or "RCNLD"), the amount of property tax expense established in base rates will be equal to the amounts listed on the latest property tax bills received by those municipalities during the proceeding.

Q. What evidence has the Company provided to demonstrate that the "Form of List" serves as the basis for the property taxes assessed for personal property?

A. In order to demonstrate that there is a direct link between the FOL provided by the Company and the amounts of assessment billed by the municipalities for Personal Property, the Company has provided the following information for every town in both NSTAR Electric and WMECO's service territory:

(a) Copies of the actual FOL as provided by the Company to each municipality for each of the most recent four years. See Exhibit ES-DPH-7 (East), Schedule DPH-2, 5, 8, and 11 for FY 2014, FY 2015, FY 2016, and FY 2017 respectively for NSTAR Electric and Exhibit ES-DPH-7 (West), Schedule

DPH-2, 5, 8 and 11 for FY 2014, FY 2015, FY 2016, and FY 2017, respectively for WMECO.[11]

(b) Copies of the actual bills received by the Company for each municipality for each of the most recent three years, which correspond to the FOLs referenced above. The property tax bills provide the actual mill rate used and the total amount of personal property taxes billed by each municipality. See Exhibit ES-DPH-7 (East), Schedule DPH-3, 6, and 9 for FY 2014, FY 2015, and FY 2016, respectively for NSTAR Electric and Exhibit ES-DPH-7 (West), Schedule DPH-3, 6, and 9 for FY 2014, FY 2015, and FY 2016, respectively for WMECO.

(c) A summary schedule for FY 2014, FY 2015, FY 2016, and FY 2017, which shows the direct correlation between the FOL and the assessment billed by the municipality for Personal Property. See Exhibit ES-DPH-7 (East), Schedule DPH-1, 4, 7, and 10, and Exhibit ES-DPH-7 (West), Schedule DPH-1, 4, 7, and 10, for NSTAR Electric and WMECO, respectively. The various components presented on this summary schedule include (i) NBV as reported on the FOL; (ii) Mill Rate provided by the municipality on each

[11] FOLs utilized in producing the FY 2014 property tax bills were provided to each municipality in calendar Q1, 2013, representing the net book value ("NBV") as of December 31, 2012. FOLs utilized in producing the FY 2015 property tax bills were provided to each municipality in calendar Q1, 2014, representing the NBV as of December 31, 2013. FOLs utilized in producing the FY 2016 property tax bills were provided to each municipality in calendar Q1, 2015, representing the NBV as of December 31, 2014. FOLs utilized in producing the FY 2017 property tax bills were provided to each municipality in calendar Q1, 2016, representing the net book value ("NBV") as of December 31, 2015.

corresponding bill; (iii) Calculated Personal Property Taxes by multiplying the NBV by the Mill Rate and dividing by 1,000; (iv) Actual Personal Property amount billed to the Company as provided by the municipality on each corresponding bill; (v) the calculated variance between the level Personal Property tax expense derived from multiplying the (i) NBV reported on the FOL by (ii) the Mill Rate provided by the municipality, and the actual amount billed.

The last column includes an explanation of each variance, if applicable (i.e., an example of a variance could be because the town is using an alternative methodology for assessing personal property); (vi) Page number reference to the Exhibits listed in (a), above, for the FOL in which the NBV shown on the summary exhibit can be found; and (vii) Page number reference to the Exhibits listed in (b), above, for copies of the property tax bills in which the Mill Rate and actual billed amount can be found.

For example, for NSTAR Electric, I will review the computation for the Town of Canton for illustrative purposes as shown on Exhibit ES-DPH-7 (East), Schedule DPH-1, for FY 2014.

As shown on Exhibit ES-DPH-7 (East), Schedule DPH-1, line 48 at Column D, I have calculated the personal property tax expense amount for the Town of Canton based on the FOL to be $1,305,669. This amount is calculated by multiplying (i) the FOL amount of $49,214,823 in Column B by (ii) the mill rate of $26.53 in Column C, all divided by 1,000.

The actual FOL provided to the Town of Canton is provided at Exhibit ES-DPH-7 (East), Schedule DPH-2, Page 23, and shows the Company's Net Original Cost of $49,214,823.

The Mill Rate is provided on the Town of Canton's FY 2014 actual bill. Copies of the Town of Canton's preliminary and actual bills are provided in Exhibit DPH-7 (East), Schedule DPH-3, starting at page 681. The actual bill, on which the Mill Rate is shown, is provided at Exhibit DPH-7 (East), Schedule DPH-3, page 682.

This calculated amount of $1,305,669 is shown in the summary schedule on Exhibit ES-DPH-7 (East), Schedule DPH-1, line 48 at Column D. As shown on the same summary schedule in Column E, this is the same as the actual amount billed by the Town of Canton in Column E, as can be seen on Exhibit DPH-7 (East), Schedule DPH-3, page 682.

This walkthrough of the computation for the Town of Canton can be performed for every municipality served by NSTAR Electric and WMECO. The Company has prepared a detailed review of all FOL and bills for each municipality and has noted on the summary schedule where variances exist, which are minimal. As previously mentioned, for the towns using the RCNLD method, there will always be a variance shown.

As explained above and demonstrated by the extensive documentation provided in Exhibit ES-DPH-7 (East) and Exhibit ES-DPH-7 (West), the net book value provided on the FOL combined with the latest mill rate are both known and measurable factors that will be utilized to determine the level of property tax expense for the Personal Property portion of property tax expense. In fact, as seen by the information provided in the summary schedules (Exhibits ES-DPH-7 (East), Schedule DPH-1, 4, 7, and 10, and Exhibits ES-DPH-7 (West), Schedule DPH-1, 4, 7, and 10) multiplying the NBV provided on the FOL by the Mill Rate provided on the property tax bill produces the amount of Personal Property tax expense on the actual property tax bill in almost all cases. For example, there are 126 separate municipalities listed on Exhibit ES-DPH-7 (East), Schedule DPH-7. For those municipalities, the calculation described above (shown on the referenced Schedule in Column D) results in the actual Personal Property tax expense, per the property tax bill (shown on the referenced Schedule in Column E), in 119 of 126 instances. Six of the seven towns that result in discrepancies not explained by rounding are a result of the fact that those towns are relying on the new method for computing Personal Property tax assessments, which, as noted in the referenced Schedule in Column G are currently under dispute. There is only one town (Westford) that has a variance greater than $1 not explained by the new valuation method; Westford has a total actual Personal Property tax expense of $65, as compared to the calculated amount of $21.

Therefore, in sum, 100 percent of the Person Property tax expense is either accurately calculated by (i) utilizing the methodology described above for those municipalities who rely on the FOL provided by the Company; or (ii) utilizing the amounts listed on the latest property tax bills for municipalities relying on an alternative, hybrid method for establishing the personal property assessment.

During the course of this proceeding the Company will provide (i) updated FOLs provided to each municipality in calendar Q1, 2017 (for FY 2018); (ii) the latest property tax bills provided by each municipality in calendar Q2, 2017 (for FY 2017); and (iii) an updated calculation of rate year property tax expense, which will rely on the amount of Real Property, Mill Rate, CPA and Water/Sewer, as reported on the latest actual bills, as well as the calculation of the Personal Property as reported on the calendar Q1 2017 FOL, multiplied by the Mill Rate per the latest bills received in 2017 to determine the level of Personal Property tax expense.

This represents a known and measurable method for determining a representative level of property tax expense in the rate year, since, as described above, the Personal Property tax expense for FY 2018 bills (which will be received by the mid-point of the rate year in 2018) will be based on the FOL provided to each municipality in calendar Q1 2017.

Q. Will the Company update the rate year level of property tax expense throughout the case?

A. Yes, the Department's precedent is to update property tax expense during the course of the case as known and measurable information becomes available. Therefore, as described above, the Company will update its property tax expense during the proceeding based on the 2018 FOLs provided in early calendar 2017 and FY 2017 property tax bills that will become available by calendar Q2 2017.

Q. Does this total Property Tax expense include taxes on non-utility plant?

A. No, I have excluded the property taxes related to non-utility property from both the adjusted test year and the rate year property tax expense.

B. Payroll Taxes

Q. Please describe the adjustment for payroll taxes.

A. The adjustment for payroll taxes is an aggregate increase of $657,825 for NSTAR Electric, as shown on Exhibit ES-DPH-3 (East), WP-DPH-26 and $112,550 for WMECO as shown on Exhibit ES-DPH-3 (West), WP-DPH-26. This adjustment calculates the change in Federal Insurance Contribution Act ("FICA") and

Medicare payroll tax expense based on the increase in test year labor charges through the mid-point of the rate year. The percentage increase in payroll tax expense is taken from Exhibit ES-DPH-2 (East), Schedule DPH-13, page 2 for NSTAR Electric and Exhibit ES-DPH-2 (West), Schedule DPH-13, page 2, for WMECO.

20. FEDERAL AND STATE INCOME TAX

Q. Have you provided the Department with a description of adjustments to per-book operating results relative to Income Taxes?

A. Yes, I have. Exhibit ES-DPH-2 (East), Schedule DPH-33, page 8 and Exhibit ES-DPH-2 (West), Schedule DPH-33, page 8, show the computation of Massachusetts Income Taxes and Federal Income Taxes calculated using the rate base and rate of return methodology according to Department standard for NSTAR Electric and WMECO, respectively. The Federal tax rate is 35 percent and the Massachusetts tax rate is 8.0 percent. The Massachusetts tax rate increased to 8.0 percent for utilities effective January 1, 2014.

Q. Have you made any adjustments to return on rate base in order to calculate the taxable income base?

A. I have adjusted Exhibit ES-DPH-2 (East), Schedule 33, page 8 and Exhibit ES-DPH-2 (West), Schedule 33, page 8 for interest expense, FAS109 Income Taxes, ITC amortization, and flow through and permanent items such as depreciation flow-through and non-deductible merger costs.

Q. Please describe the inclusion of non-deductible merger costs.

A. As described above, in accordance with the AG-DOER Settlement Agreement, the Company has included the recovery of merger costs in its revenue requirement for both NSTAR Electric and WMECO. Because certain of these costs are not deductible for federal or Massachusetts income tax purposes, the revenue requirement must contain a gross-up to ensure that the Company is able to collect the income tax liability as a result of the billed revenue. By doing this, provided merger-cost recovery is approved by the Department in this proceeding, the revenue requirement calculation will reflect the appropriate tax treatment of the merger-cost recovery.

Q. Once the taxable income base was calculated, how did you determine income tax expense?

A. To determine taxable income, I applied a tax gross-up factor of 1.672241 to the taxable income base. The taxable income amount is then multiplied by the Massachusetts income tax and Federal income tax rates to determine income tax expense at the statutory rate. To this total, I subtracted amortization of ITC and added FAS109 Income Taxes with the result being income tax expense.

21. DEPARTMENT SCHEDULES

Q. Have you developed the Department's nine schedules to accompany your revenue requirement?

A. Yes. The Department's schedules are included as Exhibit ES-DPH-2 (East), Schedule DPH-33 for NSTAR Electric and the corresponding schedule in Exhibit ES-DPH-3 (West) for WMECO.

V. COMPUTATION OF RATE BASE AND RATE OF RETURN

Q. Please describe how you determined the Company's rate of return for ratemaking purposes.

A. Exhibit ES-DPH-2 (East), Schedule DPH-31, page 1 and Exhibit ES-DPH-2 (West), Schedule DPH-31, page 1, presents the test year-end capital structure and costs of common stock equity and long-term debt for NSTAR Electric and WMECO, respectively. Schedule 31, page 2 presents the details of each Company's test year-end outstanding long-term debt balances and associated costs.

The Company relied on the actual capital structure as of June 30, 2016 in this proceeding. As shown on Exhibit ES-DPH-2 (East), Schedule DPH-31, NSTAR Electric's actual capital structure as of June 30, 2016 is comprised of 45.69 percent debt, 0.94 percent preferred stock, and 53.37 percent common equity. As shown on Exhibit ES-DPH-2 (West), Schedule DPH-31, WMECO's actual capital structure as of June 30, 2016 is comprised of 46.66 percent debt and 53.34 percent equity. WMECO's capital structure and cost of debt excludes the portion of debt attributable to its Solar investments, as shown on Exhibit ES-DPH-2, Schedule DPH-31, page 2. This adjustment is made in accordance with Article 8.5 of the stipulation agreement between WMECO and the AGO in D.P.U. 09-05, which requires that the long-term debt components that WMECO utilizes in the calculation of its Solar Program Cost Adjustment shall be appropriately reflected in, and its impact eliminated from, the long-term debt components used in calculating WMECO's distribution rates, and any other applicable rates, to the maximum extent practical.

Q. Have you prepared a summary of the Company's rate-base computation?

A. Yes. Exhibit ES-DPH-2 (East), Schedule DPH-27 and Exhibit ES-DPH-2 (West), Schedule DPH-27 provide a summary of the rate-base computation for NSTAR Electric and WMECO, respectively. As shown therein, the distribution rate base balance, including adjustments described below, is $2,734,402,771 and $440,871,528 for NSTAR Electric and WMECO, respectively.

Q. How has the Company calculated its rate base for the revenue requirement?

A. I have presented the calculations supporting rate base on Exhibit ES-DPH-2 (East), Schedule DPH-27 and Exhibit ES-DPH-2 (West), Schedule DPH-27 for NSTAR Electric and WMECO, respectively. Column B identifies the June 30, 2016 balances for Utility Plant in Service, Reserve for Depreciation and

Amortization, Reserve for Deferred Income Taxes (ADIT), Customer Deposits, Customer Advances, Materials & Supplies and the cash working capital allowance. In addition, since the accumulated deferred income taxes related to ASC 740 are included within the ADIT balance, I have included the ASC 740 regulatory asset in rate base to eliminate the impact of this non-cash item from rate base. These specific components are consistent with Department precedent for inclusion in rate base. Column C reflects the total of the pro forma adjustments made to the per-books balances to develop the requested post-test year ("PTY") rate base amounts of $2,734,402,771 and $440,871,528 for NSTAR Electric and WMECO respectively, as listed in Column D.

Q. Please describe the adjustments for PTY Rate Base in Exhibits ES-DPH-2, Schedule 27.

A. The pro-forma activity presented in Column C of Exhibit ES-DPH-2 (East), Schedule 27 and Exhibit ES-DPH-2 (West), Schedule 27 represents the addition to utility plant in service and associated ADIT relating to three post-test year capital additions for NSTAR Electric and one post-test year capital addition for WMECO. For NSTAR Electric, the adjustments to plant in service are itemized on Exhibit ES-DPH-3 (East), WP DPH-28 and include: (1) $31.8 million related to the Electric Avenue substation; (2) $24 million related to the New Bedford Area Work Center; and (3) $44.5 million related to the Seafood Way substation.

The ADIT associated with these post-test year additions totals $16,148,300, as shown on Exhibit ES-DPH-2 (East), Schedule DPH-30.

For WMECO there is one adjustment to plant in service identified on Exhibit ES-DPH-3 (West), WP DPH-28. This represents a post-test year addition to plant of $5.4 million, a corresponding retirement of ($325,049), cost of removal of ($146,217) relating to the completion of the Montague Substation project. The retirement and the cost of removal related to the Montague Substation, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-29, result in a reduction to the depreciation reserve of ($471,266). Lastly, the ADIT associated with the Montague Substation addition is $928,179, as shown on Exhibit ES-DPH-2 (West), Schedule DPH-30. All of these post-test year additions, including supporting documentation are described in the testimony of Company Witness Leanne M. Landry.

Q. Please describe the adjustments to rate base necessary to reflect the pro-forma plant in service balances.

A. **Plant-in-Service**: Exhibit ES-DPH-2 (East), Schedule DPH-28 and Exhibit ES-DPH-2 (West), Schedule DPH-28 provide detail supporting the balance of plant in service utilized for determining rate base in this proceeding. Column B illustrates actual split test year plant balances as of June 30, 2016. Column C illustrates plant in service that is recovered through the Company's FERC approved transmission tariffs. Column D illustrates the adjustments for plant in service, including adjustments identified in the rate-base verification performed by EY on behalf NSTAR Electric, as described previously in my testimony, and plant in service related to solar facilities owned by WMECO, which is recovered in a separate mechanism and therefore not included in distribution rate base. Column E illustrates the sum of columns B, C and D, or the adjusted distribution June 30, 2016 balances. Column F illustrates the projected post-split test year plant additions. Column G is for other plant in service adjustments not reflected in the previous columns. Column H is the sum of Columns E, F and G results in the pro forma plant in service balance used in determining distribution rate base in this proceeding.

Depreciation Reserve: Exhibit ES-DPH-2 (East), Schedule DPH-29 and Exhibit ES-DPH-2 (West), Schedule DPH-29 provide detail supporting the balance of depreciation reserve utilized for determining rate base in this proceeding. Column B illustrates the actual balances per the Company's books as of June 30, 2016. Column C illustrates accumulated reserve that is recovered through the Company's FERC approved transmission tariffs. Column D illustrates other adjustments related to the split test year balances, including adjustments identified in the rate-base verification performed by EY on behalf NSTAR Electric, as described previously in my testimony, and accumulated depreciation related to

Solar facilities owned by WMECO, which is recovered in a separate mechanism and therefore not included in distribution rate base. Column E is the sum of columns B, C and D. Column F illustrates other pro-forma activity. Column G illustrates other depreciation reserve adjustments. Column H is the sum of columns E, F and G results in the pro forma depreciation reserve balance used in determining distribution rate base in this proceeding.

Accumulated Deferred Income Taxes (ADIT): Exhibit ES-DPH-2 (East), Schedule DPH-30 and Exhibit ES-DPH-2 (West), Schedule DPH-30 provide detail supporting the balance of ADIT utilized for determining rate base in this proceeding. Column B provides the actual ADIT balances includable in rate base as of June 30, 2016. Column C illustrates the ADIT recovered through the companies FERC approved transmission tariffs. Column D illustrates the sum of columns B and C. Column E illustrates the non-rate base portion of ADIT that is excluded from rate base. Column F illustrates the sum of columns D and E that reflects the rate-base portion of ADIT to be included in rate base. Column G illustrates any adjustments to actual split test year ADIT activity. Column H illustrates the ADIT related to projected post-test year additions. Column I illustrates the sum of columns F, G and H reflecting the ADIT balance used in determining distribution rate base in this proceeding

Q. Please describe the remaining rate-base items presented in Exhibit ES-DPH-2 (East), Schedule DPH-27 and Exhibit ES-DPH-2 (West), Schedule DPH-27.

A. The remaining adjustments are related to Customer Deposits (Line 26), Customer Advances (Line 27), Materials & Supplies (Line 32), ASC 740 Regulatory Asset (Line 33) and Cash Working Capital (Line 34). As noted earlier, the ASC 740 regulatory asset balance is included in the calculation to offset the rate-base impact of the related ADIT balance. The Cash Working Capital adjustment is detailed on Exhibit ES-DPH-2 (East), Schedule DPH-32 and Exhibit ES-DPH-2 (West), Schedule 32 and reflects the results of the Lead Lag study described in Section VII of this testimony. The Materials and Supplies balance reflects the 13 month average balance, as presented in Exhibits ES-DPH-3 (East), WP DPH-27 and Exhibit ES-DPH-3 (West), WP-DPH-27. The remaining amounts reflect the balances on the Company's books as of June 30, 2016.

Q. What is the Company's plan for updating the revenue requirement based on actual project costs for the four post-test year additions to plant in service described above?

A. The Company has included estimates of plant in service and ADIT for each of the plant additions based on the latest available information on cost and timing of project completion. The Company will be updating the record throughout this proceeding with actual project cost information, including appropriate supporting documentation. The Company intends to submit an updated revenue requirement prior to hearings in this proceeding to reflect the latest information on plant additions, as well as to incorporate other updates and adjustments as necessary throughout the case.

Q. Please describe the purpose of Exhibit ES-DPH-2 (Consol.).

A. As described previously in this testimony, the Company is not proposing to set new base rates based on the combined cost of service in this proceeding. However, the Company is presenting a summarized consolidated revenue requirement analysis for information purposes as Exhibit ES-DPH-2 (Consol.). The majority of elements contained in the combined cost of service are simply additive of the individual costs of service for WMECO and NSTAR. However, certain of the components, most notably, the capital structure, which is based on the consolidated analysis of the total outstanding long term debt, preferred stock, and common equity of a consolidated entity, and depreciation expense, are not purely the sum of the individual company exhibits.

Q. Please describe the impact of the proposed corporate consolidation on financial reporting?

A. Upon the terms and subject to the conditions of the merger agreement developed to accomplish the corporate merger, and in accordance with the Massachusetts General Laws, at the effective time of the consolidation, WMECO will merge with and into NSTAR Electric. The separate existence of WMECO will cease, and NSTAR Electric will continue as the surviving entity. The outcome of this

"Reorganization Transaction" will eliminate the preparation and filings of WMECO reports under Securities and Exchange Commission ("SEC") Forms 10K and 10Q, and FERC Forms 1 and 3Q.

Eversource's financial reporting systems and processes will be similarly consolidated to reflect a single, consolidated company. This includes the consolidation of depreciation rates, as discussed in my testimony. The proposed consolidation is consistent with the previous merger of Cambridge Electric Light Company, Commonwealth Electric Company, Boston Edison Company and Canal Electric Company into NSTAR Electric Company, which was approved by the Department in D.T.E. 06-40. The consolidation of financial reporting will not prevent the Company from maintaining separate rates for customers in the pre-merger service territories of NSTAR Electric and WMECO, nor will it prevent the Company from maintaining separate service quality data until such time that any consolidation of rates or service quality data is proposed and approved by the Department.

VI. OTHER REVENUE ADJUSTMENTS

Q. Is the Company proposing revenue adjustments other than the distribution revenue increase described above?

A. Yes. Exhibits ES-DPH-5 (East) and ES-DPH-5 (West) provides a summary of proposed adjustments and transfers for NSTAR Electric and WMECO, respectively. In addition to the base distribution revenues and distribution rate increase, Exhibit ES-DPH-5 (East) presents adjustments to other revenues, including: (1) an increase in incremental Arrearage Management Program revenues of approximately $1.4 million, as described by the Rate Design Panel in the Tariff testimony; (2) an increase in pension and PBOP costs recovered in the PAM of approximately $31 million, described below; (3) approximately $31 million in estimated storm cost recovery to begin January 1, 2018 for all storms which have occurred for NSTAR Electric or which may occur prior to January 1, 2018, as described in Section IV, above; (4) an increase in basic service regulatory assessment costs of approximately $2.2 million to reflect the going forward recovery of a portion of regulatory assessments from basic service customers, as described in Section IV, above; (5) an increase in the level of basic service administrative costs of approximately $235,000. The derivation of this increase is shown on Exhibit ES-DPH-4, Schedule DPH-11; and (6) a reduction of approximately $74 million in lost base revenue ("LBR") recovery associated with both energy efficiency and net metering. LBR will no longer be recorded for the period after January 1, 2018 with the implementation of revenue decoupling as part of this proceeding. It should be noted that LBR is recovered on a lag, in that, for example, the LBR associated with calendar 2017 will be reflected in rates and recovered from July 1, 2018 through June 30, 2019. Therefore, although LBR will be applicable for calendar year 2017, until revenue decoupling is implement January 1, 2018 as a result of this proceeding, the actual recovery of LBR associated with 2017 will occur beginning July 1, 2018.

For WMECO, in addition to the base distribution revenues and distribution rate increase, Exhibit ES-DPH-5 (West) presents adjustments to other revenues, including: (1) property tax expense recovery of approximately $2 million related to the period 2012 through 2016, as described below; and (2) an increase in basic service regulatory assessment costs of approximately $374,000 to reflect the going forward recovery of a portion of regulatory assessments from basic service customers, as described in Section IV, above; (3) an increase in the level of basic service administrative costs of approximately $92,000. The derivation of this increase is shown on Exhibit ES-DPH-4, Schedule DPH-11.

A. Pension and Post-Retirement Benefits Other Than Pension

Q. Please describe the adjustment the Company is proposing on Exhibit ES-DPH-5 (East), Line 25 relating to pension and PBOP.

A. Exhibit ES-DPH-5 (East), Line 25 presents $31,490,920 of Pension and PBOP costs that are currently embedded in the Company's base distribution rates. The Company is proposing to adjust the recovery of these costs so that the costs are no longer recovered through base distribution rates but are instead recovered through the Company's Pension Adjustment Factor ("PAF"), consistent with recovery of the balance of the Company's Pension and PBOP expenses. To accomplish this, the Company has removed all Pension and PBOP expenses from its distribution cost of service as presented in Exhibit ES-DPH-2 (East). This approach is identical to that approved for NSTAR Gas in D.P.U. 14-150.

Q. Why is the Company proposing to move the collection of all pension and PBOP costs to the PAF?

A. The Company's PAM was approved by the Department in D.T.E. 03-47-A, and established separate, fully reconcilable, annual adjustment factors for NSTAR Electric and NSTAR Gas to recover the portion of the Company's Pension/PBOP not collected in base rates. The PAM was implemented because the Department found that the amounts required to be booked by the Company for pension and PBOP expense pursuant to SFAS 87 and SFAS 106 were based on complex calculations that tended to exhibit a level of volatility that was not easily reconciled with pension/PBOP amounts traditionally included in base rates.

The PAM is an improved ratemaking approach that allows for the recovery of pension and PBOP expense in an objective, standardized manner in which customers pay no more and no less than the amounts incurred by the Company to meet its pension and PBOP obligations. Since the inception of the PAM, the Company has excluded the amount of Pension and PBOP expenses recovered in the Company's base rates. For NSTAR Electric, the amount in base rates was initially set at approximately $32.609 million and includes transmission. In addition, the amount in base rates as of the Company's last base distribution rate proceeding D.T.E. 05-85 is required to increase annually until 2012 to reflect changes due to the Simplified Incentive Plan ("SIP") in place during that period.

It is necessary for the PAM to continue because, as was the case when the PAM was initially instituted, the amounts required to be booked by the Company for pension and PBOP expense pursuant to SFAS 87 and SFAS 106 tend to exhibit a level of volatility that makes it impossible to establish a representative level in base rates.

Therefore, the amount shown on Exhibit ES-DPH-5 (East), Line 25 of $31,490,920 represents the base amount of $32.609 million, adjusted for the final SIP adjustment factor of 109.47 percent, less the amount allocated to transmission based on the wages and salaries allocator of 11.79 percent, as shown on Exhibit ES-DPH-3 (East), WP-DPH-28, page 2. The removal of Pension and PBOP expenses from base rates is consistent with the Department's findings in D.T.E. 03-47-A.

B. Property Tax Cost Recovery

Q. Please explain the Company's proposal regarding the collection of property tax amounts associated with the FY 2012, FY 2013, FY 2014, FY 2015, and FY 2016 tax periods.

A. Article II (5) of the AG-DOER Settlement Agreement provides that the Company is entitled to recover costs associated with exogenous factors, if those costs are demonstrated to exceed a threshold in a single calendar year. Eligibility for exogenous cost recovery is allowed in accordance with the exogenous factors established by the Department in Boston Gas Company, D.P.U. 96-50 (Phase I) (1996).

These factors include cost changes caused by regulatory, judicial or legislative decisions that uniquely affect the local gas distribution industry. The dollar threshold for qualification as an exogenous factor in any calendar year is determined by multiplying the total distribution revenues of that year by a factor of 0.003212. For WMECO, the exogenous threshold is $425,319.[12] In addition, the AG-DOER Settlement Agreement specifically allows a petition for exogenous recovery of property taxes related to the change in valuation methodology affirmed by the Massachusetts Supreme Judicial Court in Boston Gas Company v. Board of Assessors of Boston, 458 Mass. 715 (2011), and established by the

[12] WMECO distribution revenues of $132,415,739 multiplied by 0.003212 is equal to an exogenous threshold of $425,319. Distribution revenues equals the target revenue requirement per the Company's RDM Tariff and the baseline low-income discount amount associated with WMECO's allowed rate case revenue requirement established in D.P.U. 10-70.

Appellate Tax Board by ruling issued on April 21, 2011 in Docket F275055, F275056 (the "Tax Ruling").

Since the AG-DOER Settlement Agreement was executed, the city of Springfield has increased its assessments to WMECO by changing its valuation methodology to assets that equally weights net book value and "reproduction cost new less depreciation," or "RCNLD." Although the change in valuation has come from a single municipality, the change in expense is significant to WMECO. Exhibit ES-DPH-4, Schedule DPH-12 presents the computation of the proposed distribution related expense recovery amount, which pertains to property tax charges in FY 2012, FY 2013, FY 2014, FY 2015, and FY 2016, totaling $10,306,354. Exogenous recovery under the AG-DOER Settlement Agreement terminates as of December 31, 2015; therefore, recovery would not extend to tax periods beyond that date as an exogenous cost.

However, on July 6, 2016, the Company filed with the Department for approval to defer, for future recovery in rates, distribution-related property tax expense assessed to the Company during the period January 1, 2016 through December 31, 2016 on the basis that the costs are extraordinary expenditures that warrant rate recovery. Therefore, the Company is proposing to recover the portion of taxes attributable to the new valuation method for the periods 2012 through 2016 over a period of 5 years, starting January 1, 2018.

Q. Could you briefly explain the basis of the change in valuation?

A. Historically, property tax valuations for utility-owned distribution property were based on the net book value of the plant in service as of the valuation date. On December 16, 2009, the Massachusetts Appellate Tax Board ("ATB") issued a ruling finding that the fair cash value of Boston Gas Company's utility property was not limited to net book value because there was "substantial evidence" that a potential buyer would pay more than net book value for the utility property at issue. See, Boston Gas Company d/b/a KeySpan Energy Delivery New England v. Assessors of Boston, Mass. The Tax Ruling stated that municipalities could assess above net book value in the existence of special circumstances. In 2011, the Supreme Judicial Court ("Court") affirmed the Tax Ruling, finding that the ATB had the discretion to establish the methodology.

Q. Is the Company taking any action to challenge the change in valuation methodology established by the Appellate Tax Board?

A. Yes. The actual methodology approved by the Tax Ruling was applicable only to the City of Boston's valuation of Boston Gas Company facilities. In the absence of special circumstances, utility valuations should still be at net book value on a municipality-by-municipality basis. However, local cities and towns recognize that the change in valuation has the potential to create significant new tax revenues for local municipalities, and therefore, the Company is starting to experience attempts to increase valuations across a number of cities and towns.

Because the change in valuation methodology creates such a significant cost change in relation to property tax on utility property, the Company has commenced efforts to vigorously challenge the change in valuation through the abatement process. As an initial step in this process, the Company filed for abatements with the City of Springfield, as described above. Because the city rejected the abatement, the Company has appealed the property tax to the ATB. If the ATB appeal proves unsuccessful, the Company would then file an appeal with the Massachusetts Court of Appeals. By nature, this process is a lengthy, resource-draining engagement; however, the costs are warranted by the fact that the change in valuation methodology would be a permanent change, producing potential cost increases in the tens of millions of dollars for Eversource customers in Massachusetts in the final result. Thus, the Company has taken a proactive approach designed to mitigate that impact.

Q. Please explain the Company's petition to defer, for future recovery in rates, distribution-related property tax expense for FY 2016.

A. As previously stated, on July 6, 2016, the Company filed a request for an order by the Department authorizing the Company to defer, for future recovery in rates, the costs incurred by the Company in relation to a change in the valuation basis of municipal property tax in the City of Springfield in D.P.U. 16-107. On December 31, 2011, the Company received a property tax bill from the City of Springfield substantially increasing WMECO's taxes on local utility property based on the new property valuation method authorized by the 2011 ATB Ruling for FY 2012.

On January 24, 2012, the Company filed an abatement with the City of Springfield, which was denied on April 17, 2012. The Company filed an appeal of the denied abatement with the ATB on May 16, 2012, in Docket #315550 which remains pending before the ATB as of this date. All property tax bills from the City of Springfield received by WMECO since 2012 have reflected the new valuation method. In total, the Company has incurred $10,306,354 in additional distribution-related property tax expense (net of transmission-related property and solar-related property) exclusively related to the change in valuation methodology since the beginning of 2012 for the City of Springfield, which is just one of 59 municipalities served by the Company. The increase in property tax expense related to FY 2012 through FY 2015 is covered under the AG-DOER Settlement Agreement for exogenous treatment. For FY 2016, the Company requested approval to defer those distribution-related costs, as those costs are significant to WMECO and beyond the Company's control.

VII. LEAD LAG STUDY

Q. You mentioned earlier in your testimony that you prepared a lead lag study. Is that correct?

A. Yes. I prepared a lead lag study (the "Lead Lag Study") to update and establish the net lag days associated with Basic Service working capital collected through the Basic Service Adder for WMECO and NSTAR Electric, respectively, and to establish the net lag days to be used for Other Operating Expense working capital that will be included in base rates. The Lead Lag Study is summarized and included in the Revenue Requirement Analysis as Exhibits ES-DPH-2 (East), Schedule DPH-32 and Exhibit ES-DPH-2 (West), Schedule DPH-32. Exhibit ES-DPH-6 contains the Lead Lag Study.

Q. What is cash working capital?

A. Cash working capital is the amount of money that is needed by NSTAR Electric and WMECO to fund operations in the time period between when expenditures are incurred to provide service to customer and when payment is actually received from customers.

Q. What are the components of cash working capital?

A. The cash working capital allowance is divided into two components – (1) Basic Service Working Capital, and (2) Other O&M Working Capital to accommodate the assignment of recovery of the Basic Service component through the Basic

Service Adder and the Other O&M component through base rates. Each component uses revenue lag days and expense lead days to determine the cash working capital requirement.

Q. Please define the terms "revenue lag days" and "expense lead days."

A. Revenue lag is the time, measured in days, between delivery of a service to NSTAR Electric and WMECO customers and the receipt by NSTAR Electric and WMECO of the payment for such service. Similarly, expense lead is the time, again measured in days, between the performance of a service on behalf of NSTAR Electric and WMECO by a vendor and payment of such service by NSTAR Electric and WMECO. Since base rates are based on revenue and expenses booked on an accrual basis, the revenue lag results in a need for capital while the expense lead offsets this need to the extent the Company is typically not required to reimburse its vendors until after a service is provided.

Q. Please describe the Lead Lag Study (Exhibits ES-DPH-6) and its findings.

A. The Lead Lag Study consists of 9 schedules. Schedule WC-1 summarizes the overall results of the study. Schedule WC-2 (pages 1 through 10) calculates the revenue lag. Schedule WC-3 calculates the lead related to purchased power costs. Schedule WC-4 through WC-9 calculate the lead related to various categories of operating expenses The Lead Lag Study produced a net lag of 1.72 days or 0.47

percent (1.72/365), and 33.30 days or 9.12 percent (33.30/365) for Other O&M expense.

1. REVENUE LAG DAYS

Q. How is the revenue lag computed?

A. The revenue lag consists of a "meter reading or service lag," "collection lag" and a "billing lag." The sum of the days associated with these three lag components is the total revenue lag experienced by NSTAR Electric and WMECO. See Exh. ES-DPH-6, Schedule WC -2, Page 1 of 10.

Q. What lag does the Lead Lag Study reveal for the component "service or meter reading lag?"

A. The Lead Lag Study reveals 15.21 days. This lag was obtained by dividing the number of billing days in the test year by 12 months and then in half to arrive at the midpoint of the monthly service periods.

Q. How was the "collection lag" calculated and what was the result?

A. The "collection lag" for utility service totaled 30.82 days. This lag reflects the time delay between the mailing of customer bills and the receipt of the billed revenues from customers. The 30.82 days lag was arrived at by a thorough examination of utility service accounts receivable balances for all accounts using the accounts receivable turnover method. A combination of daily balances and end of month balances were utilized as the most accurate measure of customer accounts receivable. Exhibits ES-DPH-6, Schedule WC-2, pages 2 through 8, detail daily balances as provided in reports generated from the Customer billing system for the majority of the accounts receivable accounts. Schedule WC-2, Page 10, Line 16 further adjusts for balances of accounts not tracked on a daily basis (Special Ledger Accounts).

End of month balances are utilized for these accounts to calculate average daily balances. This same page also summarizes the month end reserve balances for uncollectible accounts. Exhibit DPH-6, Schedule WC-2, page 1 shows the net sum of the average CIS balances, Special Ledger Accounts and Reserve for uncollectible accounts of $245,902,954. Exhibit DPH-6, WC-2, page 9 calculated the average daily revenue of $7,977,993 by dividing total revenue by 365 days. The resulting Collection Lag is derived by dividing the Average daily accounts receivable balance by the average daily revenue amount to arrive at the Collection lag of 30.82 days.

Q. How did you arrive at the 1.00 day "billing lag"?

A. Most of the Company's customers are billed the evening after the meters are read. Therefore, I have included a 1.00 day billing lag. I have not made an exception for large customers which may require additional time to process.

Q. Is the total revenue lag computed from these separate lag calculations?

A. Yes. The total revenue lag of 47.03 days is computed by adding the number of days associated with each of the three revenue lag components. See, Exh. ES-DPH-6, Schedule WC–2, Page 1 of 10. This total number of lag days represents the amount of time between the recorded delivery of service to customers and the receipt of the related revenues from customers.

2. BASIC SERVICE LEAD DAYS

Q. What expense is Basic Service Cash Working Capital intended to address?

A. Basic Service Cash Working Capital provides cash working capital for expenses paid by NSTAR Electric and WMECO on behalf of customers to wholesale electric power suppliers and renewable energy contract costs.

Q. How is Basic Service Cash Working Capital recovered as a cost component in the Companies tariffs?

A. As noted earlier, Basic Service Cash Working Capital is recovered as a separate cost component for WMECO and proposed in this proceeding for NSTAR Electric. As such, the Basic Service Cash Working Capital allowance has been removed from the total cash working capital included in distribution rate base as shown on Exhibit ES-DPH-2 (East), Schedule DPH-32 and Exhibit ES-DPH-2 (West), Schedule DPH-32. However, at the time the Department issues the order in this docket, the Companies will update their retail Basic Service tracker filings for the results of the Lead Lag Study presented in this proceeding.

Q. How was the Basic Service net lag days calculated?

A. The Basic Service net lag days are based upon data for the 12-months ended December 31, 2015. The Basic Service net lag days reflected in this study produced a net lag for Basic Service of 1.72 days as shown on Exhibit ES-DPH-6, Schedule WC-1 page 1, Line 4

Q. How were the weighted Basic Service lead days determined?

A. To determine the expense lead associated with Basic Service, all supplier invoices were identified that were paid during the calendar test year ended December 31, 2015. The number of days was calculated for each invoice from the midpoint of the related service period to the date the invoice was paid. The days were dollar weighted, totaled and averaged to arrive at an overall weighted average purchase gas expense lead. See Exhibit ES-DPH-6, Schedule WC–3.

3. OTHER O&M & TAXES CASH WORKING CAPITAL

Q. Please explain Other O&M Cash Working Capital?

A. The Other O&M Cash Working Capital component is composed of O&M expense, payroll taxes and property taxes. These are types of expenses that NSTAR Electric and WMECO pays to underwrite the activities conducted in service to customers before it receives payment from customers for those services. It is appropriate for NSTAR Electric and WMECO to recover its carrying cost for this service.

Q. Did your Lead Lag Study recalculate Other O&M Expense lag days for this proceeding?

A. Yes. The Other O&M & Tax Expense lead days are based upon calendar test year 2015 data, adjusted for known and measurable changes. As reflected on Exhibit ES-DPH-6, Schedule WC-4, the revenue lag and expense lead days resulting from the Lead Lag Study have been applied to adjusted test year O&M & Tax amounts to determine the Company's cash working capital requirements to be included in rate base.

Q. Is the term "lead days" in this Lead Lag Study the same as that defined for Basic Service?

A. Yes, it is. Lead days are the number of days between the average delivery date goods and services are purchased by NSTAR Electric and WMECO or rendered by a vendor and the payment made by NSTAR Electric and WMECO for those goods and services.

Q. Are the lead periods in the Lead Lag Study the same as those calculated for the purpose of determining the lead in the Basic Service Gas Working Capital analysis?

A. No. Because the lead period is determined as between NSTAR Electric and WMECO and the various vendors of goods and services, individual analyses must be undertaken.

Q. In determining the expense lead period, how were the weighted lead days in payment of O&M costs determined?

A. First, total O&M expense excluding gas costs were disaggregated into 8 major cost categories, as shown on Exhibit ES-DPH-6, Schedule WC–4. Payments were reviewed and the lead days were calculated for each category. Depending on the volume and dollar amount of the payments, some categories' lead days were calculated using all payments and some were calculated using a sampling of the payments. Once the lead days for each category were determined, the lead days were summarized and dollar weighted to arrive at Other O&M expense lead days. See, Exhibit ES-DPH-6, Schedule WC –4.

Q. Briefly describe the lead days calculated for each category.

A. The payroll lead is shown on Exhibit ES-DPH-6, Schedule WC–5. NSTAR Electric and WMECO have two individual pay groups: monthly and weekly. The monthly group is paid on the first business day each month while the weekly group is paid each Wednesday for the previous weeks' work (based on a work week of Sunday-Saturday). This results in an overall weighted lead of 7.64 days.

Q. Please explain the negative days associated with corporate insurance and the lead days calculated for regulatory commission expenses?

A. Corporate insurance premiums are paid in advance, generally on an annual basis depending on the coverage period of the individual policy. Payments made during the test year were reviewed and a negative 171.76 days was calculated reflecting prepayment of these costs. <u>See,</u> Exhibit ES-DPH-6, Schedule WC-7.

Regulatory Commission expenses are paid when invoiced during the year. In 2015, six such payments were made as illustrated on Exhibit DPH-6, Schedule WC-6. Based on the timing of the payments, a lead of 111.27 days was calculated.

Q. How was the lead related to other O&M expenses which were not individually studied determined?

A. I obtained a complete list of vendor payments made by NSTAR Electric and WMECO during the test year directly from the Company's Accounts Payable system. I randomly selected 40 vendor payments and calculated the amount of time between the timing of the service provided as compared to when the payment for the service was actually made. This calculation resulted in an average lead of 38.24 days as shown on Exhibit DPH-6, WC-8.

Q. Would you briefly describe the lead days associated with Other Taxes?

A. Yes. Exhibit ES-DPH-6, Schedule WC-9 summarizes the results of the analysis of lead days for property tax, FICA & Medicare and Federal Unemployment and State Unemployment tax expenses. The (5.90) property tax lead days were calculated based on a query of the tax payments made in 2015. The FICA & Medicare, Federal Un-employment taxes, and State Unemployment Taxes leads of 8.53 days, 17.10 days, and 41.89 days, respectively, were calculated based on the 2015 payments made to the government for these payroll related taxes.

Q. How is the total O&M & Taxes Lag determined?

A. The lead in payment for the cost of goods and services purchased of 13.73 days is subtracted from the lag in receipt of customer revenue of 47.03 days to produce the total O&M Lag of 33.30 days. <u>See</u>, Exhibit ES-DPH-6, Schedule WC-1.

Q. Would you summarize the Company's proposal regarding Cash Working Capital?

A. Yes. The Basic Service Cash Working Capital component is not included in the cost of service and will be recovered in accordance with the NSTAR Electric and WMECO Basic Service tariff. The O&M Cash Working Capital component is 33.30 days or 9.12 percent. For purpose of my revenue requirement analysis, the cash working capital component proposed for inclusion in the calculation of distribution rate base is $37,456,650 and $7,547,361 for NSTAR Electric and

WMECO respectively, which represents the cash working capital allowance calculated for Other O&M Expense and taxes. See, Exhibit ES-DPH-2 (East), Schedule DPH-32 and See, Exhibit ES-DPH-2 (West), Schedule DPH-32.

Q. Does the Lead Lag Study produce results within the Department's 45-day convention?

A. Yes. The Lead Lag Study produced lower results than the Department's 45-day convention, which ensures savings for customers.

VIII. CONCLUSION

Q. Do you plan to continue to monitor and update items noted within this testimony?

A. Yes. Within this testimony, several adjustments were made based on estimates of O&M expenses and capital additions through June 30, 2016. These cost categories will be monitored and updated throughout this proceeding.

Q. Does this conclude your testimony?

A. Yes, subject to reserving the Company's right to respond to additional issues raised in discovery or at hearings.