UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF

LISA S. GLOVER

New Hampshire Public Utilities Commission

Docket No.: DE 18-

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Lisa S. Glover. My business address is 6 Liberty Lane West, Hampton, NH.

Q. For whom do you work and in what capacity?

A. I am a Senior Energy Analyst for Unitil Service Corp. (”USC”). USC provides management and administrative services to Unitil Energy Systems, Inc. (“UES”) and Unitil Power Corp. (“UPC”).

Q. Please describe your relevant educational and work experience.

A. I received my Bachelor of Science degree in Environmental Science from the University of Massachusetts Amherst and a Master of Public Administration from Norwich University in Vermont. I joined Unitil Service Corp. in February 2003 and have held various positions within the company prior to joining Energy Contracts in May 2014 in my current position as Senior Energy Analyst. I have primary responsibilities in the areas of default service budgeting, administration, and procurement; long-term renewable energy procurement; electric market operation and data reporting; and Renewable Portfolio Standard compliance.

Q. Have you previously testified before the New Hampshire Public Utilities Commission ("Commission")?

A. Yes.

II. SUMMARY OF TESTIMONY

Q. Please summarize your testimony in this proceeding.

A. My testimony presents the cost data and explains the reasons for the proposed changes to UES's Stranded Cost Charge ("SCC"), and External Delivery Charge ("EDC"), effective August 1, 2018. Ms. Linda S. McNamara is sponsoring testimony on the reconciliation and rate development for the SCC and EDC, based on the cost data included in my testimony. Mr. Douglas Debski has provided testimony to explain the calculation of displaced distribution revenue associated with net metering for 2017, which is included in the proposed EDC.

III. STRANDED COST CHARGE COSTS

Q. What costs are included in the SCC?

A. The SCC includes the Contract Release Payments ("CRP") from Unitil Power Corp., charged in accordance with the Amended Unitil System Agreement, approved by both the Commission in Docket No. DE 01-247 and by the FERC.

Schedule LSG-1, page 1, provides a description of the CRP. Page 2 provides the CRP by month reflecting actual data from August 2016 through April 2018 and estimated data from May 2018 through July 2019.

Q. Please describe the Amended Unitil System Agreement.

A. The purpose of the Amended Unitil System Agreement was to restructure UES's power supply in order to implement retail choice. Prior to the implementation of the Amended Unitil System Agreement on May 1, 2003, UES purchased full-requirements power supply from UPC at fully reconciling, cost-of-service rates.

The Amended Unitil System Agreement provides for termination of power sales from UPC to UES and the payment of UPC's on-going costs by UES. These on-going costs are defined in the Amended Unitil System Agreement as CRP and Administrative Service Charges ("ASC"). UES recovers the CRP through the SCC and the ASC through the EDC. The ASC will be discussed later under the EDC costs.

Q. Please describe the CRP.

A. The CRP is calculated in accordance with Appendix 1 of the Amended Unitil System Agreement. The CRP is equal to the sum of the Portfolio Sales Charge, the Residual Contract Obligations, the Hydro-Quebec Support Payments, and True-Ups from Prior Periods. The Portfolio Sales Charge and the Residual Contract Obligations have ended. The CRP estimates in this filing, therefore, include only the Hydro-Quebec Support Payments.

The Hydro-Quebec Phase II Agreements require UPC to support the Hydro-Quebec Phase II facilities through October 2020. These facilities are part of one high-voltage, direct-current ("HVDC") interconnection between New England and Quebec. UPC has no obligation to support Phase I of these facilities. Currently, the costs for maintenance and construction of these facilities are paid by Interconnection Rights

Holders ("IRH") through support agreements between the IRH members and the owners of the HVDC transmission facilities. The Hydro-Quebec Support Payments include all costs incurred by UPC pursuant to the Hydro-Quebec Phase II Agreements, offset by any revenues received by UPC for sales of UPC's Hydro-Quebec Phase II entitlement. The Hydro-Quebec Support Payments are not a known payment stream because they are based on the cost-of-service of the Hydro-Quebec Phase II transmission facilities. As discussed below, UPC receives revenue for short-term sales of transmission rights and capacity rights. These revenues operate to offset the expense of the Hydro-Quebec Support Payments.

The True-ups from Prior Periods reflect any differences in costs resulting from the reconciliation of estimated costs to actual costs under the CRP component of the Amended Unitil System Agreement. The True-ups from Prior Periods also provide for the reconciliation of costs billed to UPC for services purchased in UPC's performance of the Unitil System Agreement, prior to May 1, 2003. The CRP estimates in the current filing reflect no True-ups from obligations prior to May 1, 2003.

Q. Please provide an estimate of each of the components of the CRP.

A. Details regarding the CRP are provided in Schedule LSG-3. This shows the actual itemized CRP and ASC charges as billed by UPC to UES for the period beginning August 2016 through April 2018 under the Amended Unitil System Agreement. Beginning on page 2 of Schedule LSG-3, estimated CRP and ASC for the 15-month period beginning May 2018 and ending July 2019 are presented. UPC bills UES on estimated data, prior to the beginning of the month of service. These estimates are trued-up to actuals on a two-month lag.

Q. Please provide a comparison of the estimated CRP for the upcoming SCC rate period (August 2018 through July 2019) to the projected CRP for the current SCC rate period (August 2017 through July 2018).

A. Table 1 below provides a comparison of the estimated CRP for the upcoming SCC rate period to the projected CRP for the current SCC rate period. At the time of the preparation of this estimate of the CRP, actual CRP expense data was available through April 2018. As such, the projected actual CRP for the current SCC rate period (August 2017 through July 2018) is comprised of nine months of actual data and three months of estimated data.

Table 1. Comparison of Estimated CRP for August 2018 through July 2019 to Projected CRP for August 2017 through July 2018
Unitil Power Corp.

Line No.	Line Item Description	Aug 2017 - July 2018 9 Months Act. and 3 Months Est.	Aug 2018 - July 2019 Estimate	Variance (Aug 2018 - July 2019 Costs minus Aug 2017 - July 2018 Costs)
1.	Portfolio Sales Charge	$0	$0	$0
2.	Residual Contract Obligations	$0	$0	$0
3.	Hydro-Quebec Support Payments	($459,098)	($776,327)	($317,229)
4.	Subtotal (L. 2 through 4)	($459,098)	($776,327)	($317,229)
5.	True-up for estimate	($290,652)	$0	$290,652
6.	Obligations prior to May 1, 2003	$0	$0	$0
7.	Total CRP as billed by Unitil Power Corp.	($749,750)	($776,327)	$26,577

Q. Please report on the efforts by UPC to mitigate the stranded cost associated with the Hydro-Quebec Phase II Agreements.

A. UPC mitigates these costs through short-term sales of the transmission rights and capacity, which UPC is entitled to through its support of the Hydro-Quebec Phase II facilities. Currently, UPC resells its transmission rights on a short-term basis through a brokering agreement with Green Mountain Power ("GMP"). Under this brokering agreement, which was amended November 1, 2015, to increase the maximum duration of transmission sales from one month to one year, GMP offers UPC's transmission rights associated with the Hydro-Quebec Phase II facilities for sale on a short-term basis through GMP's OASIS website. GMP has authority under this amended agreement to enter into binding sales of UPC's Hydro-Quebec transmission rights for firm and non-firm transactions for a maximum term of one year. UPC also has rights to Hydro-Quebec Interconnection Capability Credit ("HQICC"), pursuant to the ISO Tariff. UPC is reimbursed by GMP for its HQICC at a price equal to the ISO Net Regional Clearing Price.[1] Please refer to Schedule LSG-5 for itemized cost and revenue offsets, related to the Hydro-Quebec Phase II Support Agreements.

IV. TERMINATION OF PHASE II SUPPORT AGREEMENTS

[1] The Net Regional Clearing Price is calculated by first adding Forward Capacity Auction payments to Net Reconfiguration Auction Credits or Charges and subtracting Peak Energy Rent Adjustments. This total is then divided by the Net Regional Supply Obligation.

Q. Please provide background on the Hydro-Quebec Phase II Support Agreements.

A. The Hydro-Quebec high voltage direct current ("HVDC") transmission facilities were supported by two sets of agreements signed in the 1980s. The Support Agreements pre-dated electric industry restructuring and were entered into on a pro rata basis by all or nearly all members of the New England Power Pool ("NEPOOL"). The Phase I Support Agreements were signed in 1980, and brought interconnection and transmission facilities with approximately 690 MW of transfer capability from the Hydro-Quebec system to New England into service in 1986. The Phase II Support Agreements were signed in 1985 and increased the total transfer capabilty from Hydro-Quebec to New England to approximately 2,000 MW. A Restated Use Agreement[2] defines the rights ("Use Rights") of parties to the Support Agreements, also known as Interconnection Rights Holders ("IRH"). The term of the Phase I and Phase II Support Agreements is 30 years after the Phase II facilities went into service. The Phase II facilities went into service in the fall of 1990 and the agreements are set to expire October 31, 2020.

Q. What is Unitil Power Corp.'s share of the Phase II Support Agreements?

[2] New England Power Pool FERC Electric Third Revised Rate Schedule No. 4.

A. UPC's share of Phase II is 1.227 percent, which provides Use Rights for approximately 16 MW of transfer capability. The Phase II Support Agreements include four separate agreements.[3] UPC does not have a share of Phase I.

Q. Why didn't Unitil Power Corp. divest its Phase II entitlement during restructuring?

A. UPC sought to divest its Phase II entitlement early in the divestiture process, but did not find market interest so the entitlement was retained in Unitil Energy Systems, Inc's power supply restructuring plan. UPC has mitigated the costs of the Phase II Support Agreements since restructuring began and recovered costs from and credited revenues to UES under the Unitil System Agreement. In turn, UES has recovered the net costs in the SCC. As documented in the prior section, mitigation has taken the form of transmission sales and HQICC.

Q. What are the renewal rights associated with the Support Agreements?

A. The Support Agreements include a right to renew for an additional period of up to 20 years. The right must be exercised no later than two years before the termination date, or by October 31, 2018. There is a requirement that 100 percent of the entitlements must be renewed or the renewal right is forfeited. Thus, if an

[3] Phase II Boston Edison AC Facilities Support Agreement, dated June 1, 1985. Phase II Massachusetts Transmission Facilities Support Agreement, dated June 1, 1985. Phase II New England Power AC Facilities Support Agreement, dated June 1, 1985. Phase II New Hampshire Transmission Facilities Support Agreement, dated June 1, 1985.

individual IRH decides not to renew, then their shares would need to be allocated among those IRH who choose to renew.

Q. Has UPC decided to exercise the renewal right or to let its share of the Support Agreements terminate?

A. UPC has decided not to renew its share of the Phase II Support Agreements and to let its share terminate.

Q. Why has UPC elected not to renew the Phase II Support Agreements and the Restated Use Rights Agreement?

A. These agreements are not needed to provide service to UES' customers. UES is a distribution company that purchases electric default service power from the market as directed by the Commission. The purpose of the Support Agreements, which pre-dated industry restructuring, was to build the HVDC transmission line for the benefit of the New England region. The facilities are now in service and there is no indication that UPC not renewing its share of the support agreement will lead to the abandonment of the facilities. Lastly, although mitigation revenues from UPC's Phase II entitlement have been higher than costs in recent years, the level of such revenues is largely outside of UPC's control. If mitigation revenues were to fall below the cost of support payments in the future, UPC would be unable to offset the cost of the obligation.

Q. What other benefits derive from UPC's decision not to renew the Phase II Support Agreements?

A. Allowing the Phase II Support Agreeements to terminate will allow the elimination of the Stranded Cost Charge, the dissolution of UPC and the termination of the Unitil System Agreement. These changes would also better align UES's energy supply related commitments with its energy procurement practices and reduce associated administrative costs.

IV. EXTERNAL DELIVERY CHARGE COSTS

Q. What costs are included in the EDC?

A. Schedule LSG-2, page 1 provides a description of the costs included in the EDC:

1) Third Party Transmission Providers (Eversource Network Integration Transmission Service);
2) Regional Transmission and Operating Entities;
3) Third Party Transmission Providers (Eversource Wholesale Distribution);
4) Working Capital Associated with Other Flow-Through Operating Expenses-transmission costs only;
5) Transmission-Based Assessments and Fees;
6) Load Estimation and Reporting System and EDI Communication Costs;
7) Unmetered Purchased Power;
8) Data and Information Services;
9) Legal Charges;
10) Consulting Outside Service Charges;
11) Administrative Service Charges;
12) EDC Portion of the Annual PUC Assessment;
13) Regional Greenhouse Gas Initiative Rebates;
14) Rate Case Expenses;
15) Other Regulatory Expenses;
16) Working Capital Associated with Other Flow-Through Operating Expenses-excluding transmission costs; and

17) Displaced Distribution Revenue.

Items 1), 2), and 3) of the Schedule are discussed below:

The <u>Third Party Transmission Providers (Eversource Network Integration Transmission Service)</u> component of the EDC consists of Network Integration Transmission Service taken by UES and provided by the Eversource Energy companies[4] ("Eversource") pursuant to Schedule 21-ES of the ISO New England Inc. Transmission, Markets and Services Tariff (FERC Electric Tariff No.3) ("ISO Tariff").

The <u>Regional Transmission and Operating Entities</u> component of the EDC consists of all charges from ISO New England Inc. ("ISO"). These charges consist primarily of Regional Network Service, taken pursuant to the ISO Tariff. Other major costs (which are also billed by the ISO to UES) are various ancillary services allocated to transmission customers, such as VAR support, dispatch service, and black-start capability.

The <u>Third Party Transmission Providers (Eversource Wholesale Distribution)</u> component consists of Distribution Delivery Service ("DDS") charges with Eversource. DDS compensates Eversource for the wheeling of power from the Eversource transmission system to UES's distribution system over certain

[4] Northeast Utilities formerly changed its name and those of all its subsidiaries in January 2015 to Eversource Energy.

facilities, which are classified as distribution facilities for accounting purposes and, therefore, are not included in the Eversource transmission system rate base.

Q. Please provide the External Delivery cost data, which was utilized in the calculation of the EDC.

A. Schedule LSG-2 provides the External Delivery cost data used in the calculation of the EDC. Page 2 provides actual historic External Delivery cost data for the year beginning August 2016 through July 2017. Actual External Delivery cost data for the months of August 2016 through April 2017 was included in UES's last rate and reconciliation filing, Docket No. DE 17-102. In that docket, UES provided estimated External Delivery costs for May 2017 through July 2018. Rather than present partial data beginning with May 2017, UES is presenting the full period. Page 3 of Schedule 2 provides External Delivery cost data for the current EDC rate period, August 2017 through July 2018. Actual cost data is available through April 2018, and estimated cost data is provided for May 2018 through July 2018. Finally, page 4 of Schedule LSG-2 provides estimated External Delivery costs for the upcoming EDC rate period, August 2018 through July 2019.

Q. Please provide a comparison of the External Delivery costs for the upcoming EDC rate period (August 2018 through July 2019) to the projected External Delivery costs for the current EDC rate period (August 2017 through July 2017).

A. Please refer to Table 2 below for an itemized comparison of estimated External Delivery cost for the upcoming EDC rate period to the projected External Delivery costs for the current rate period.

Table 2. Comparison of Estimated External Delivery costs for August 2018 through July 2019 to projected External Delivery costs for August 2017 through July 2018
Unitil Energy Systems, Inc.

Line No.	Line Item Description	Aug 2017 - July 2018 9 Months Act. and 3 Months Est.	Aug 2018 - July 2019 Estimate	Variance (Aug 2018 - July 2019 Costs minus Aug 2017 - July 2018 Costs)
1.	Third Party Transmission Providers (Eversource Network Integration Transmission Service)	$2,533,880	$1,067,774	($1,466,105)
2.	Regional Transmission and Operating Entities	$24,285,166	$24,171,067	($114,099)
3.	Third Party Transmission Providers (Eversource Wholesale Distribution)	$2,864,234	$2,866,431	($856)
4.	Working Capital Associated w/ Other Flow-Through Operating Expenses-transmission costs only	$391,786	$352,009	($39,777)
5.	Transmission-based Assessments and Fees	$13,500	$13,500	$0
6.	Load Estimation and Reporting System and EDI Communication Costs	$226,631	$240,000	$13,369
7.	Unmetered Purchased Power	($201)	$0	$201
8.	Data and Information Services	$15,000	$15,000	$0
9.	Legal Charges	$4,346	$30,000	$25,654
10.	Consulting Outside Service Charges	$1,074	$47,082	$46,008
11.	Administrative Service Charges	$4,282	$3,193	($1,089)
12.	EDC Portion of the Annual PUC Assessment	$6,756	$13,205	$6,449
13.	Regional Greenhouse Gas Initiative Rebates	($1,025,934)	($1,025,934)	$0
14.	Rate Case Expenses	$330,234	$0	($330,234)

15.	Other Regulatory Expenses	$136,935	$136,935	$0
16.	Working Capital Associated w/ Other Flow-Through Operating Expenses-excluding transmission costs	$19,394	$19,394	$0
17.	Displaced Distribution Revenue	$234,959	$187,746	($47,213)
18.	**Total External Delivery Costs**	**$30,042,042**	**$28,134,349**	**(1,907,692)**

Q. Please explain the projected decrease in External Delivery costs for the upcoming EDC rate period (August 2018 through July 2019) over the current EDC rate period (August 2017 through July 2018).

A. The External Delivery costs for the upcoming EDC rate period are projected to be $1,907,692 lower than those in the current rate period. The largest contributor to the decrease is the projected Third Party Transmission Providers (Eversource Network Integration Transmission Service) costs. The forecasted revenue requirements decreased from a year ago due to the recent federal tax legislation lowering the Federal corporate income tax rate. The decrease offset the impact of higher revenue requirements associated primarily with 2018 transmission capital additions. Regional Transmission and Operating Entities costs are also projected to be lower which are calculated based on historical retail sales and the ISO Schedule 1 rate as well as the Regional Network Service ("RNS") rate, both of which are expected to be lower than the rates previously in effect (see http://iso-ne.com/markets-operations/settlements/rate-development). Also contributing to the overall variance are Rate Case Expenses which were expended during the current rate period with no additional costs anticipated.

Q. What legal charges does UES expect to incur under the EDC?

A. UES estimates that it will incur legal charges of $30,000 for the upcoming EDC rate period (August 2018 through July 2019). These costs include charges for an upcoming FERC tariff filing that the Company expects to make within the upcoming EDC rate period. These costs also cover half of the annual NAESB membership as well as transcripts. Any legal costs associated with procurement of Default Service are recovered through the Default Service Charge.[5]

Q. What consulting charges does UES expect to incur under the EDC?

A. UES estimates that it will incur approximately $47,000 in outside consulting service charges for the upcoming EDC rate period (August 2018 through July 2019). These costs include charges associated with the FERC filing previously referenced, as well as recovery of costs associated with consultants retained by the OCA and for which OCA has billed UES.

Q. Please provide the detail behind the estimate for the Administrative Service Charges.

A. Details regarding the ASC are provided in Schedule LSG-3 on lines 10 through 18. The ASC includes any costs incurred by UPC, relative to UPC's obligations under the Amended Unitil System Agreement, which are not otherwise assigned

[5] This is in accordance with the settlement agreement approved in Docket No. DE 05-064.

or assumed by UES. These costs include NEPOOL, ISO, and RTO costs, as well as legal, consulting, and other outside services. It does not include any internal costs of USC, UES or UPC.

Q. Has UES included Regional Greenhouse Gas Initiative (RGGI) rebates in the proposed EDC?

A. Yes. UES has included the rebate of excess RGGI auction proceeds applicable to all retail electric customers as a separate line item in the EDC. UES records the rebates in the EDC on the month in which it is received, and applies carrying charges. For the actual period of August 2016 through April 2018, UES has recorded seven rebate amounts totaling $1,641,328. In accordance with Order No. 25,664, UES has included estimates of auction amounts it expects to receive through July 2019 in order to ensure customers receive the credit, or estimate thereof, in a timely manner. These estimates are shown on Schedule LSG-2, Pages 3 and 4.

Q. Has UES included in this filing the recovery of costs associated with lost distribution revenue due to net metering?

A. Yes. In accordance with Order No. 25,991 in DE 15-147, UES is allowed to recover displaced distribution revenue through its EDC. Please see the Testimony and Exhibits prepared by Mr. Douglas Debski.

Q. Please describe the additional EDC expenses included in Schedule LSG-2 for the upcoming rate period.

A. Changes to this schedule include presenting line items that are considered transmission and non-transmission in order to properly bill and credit alternative net metering customers. On Page 3 of 4 of Schedule LSG-2, beginning with August 2017, Unmetered Purchased Power has been separately line itemed in order to remove it from the regional transmission line item in which it was previously included. Working Capital associated with Other Flow-Through Operating Expenses has been broken out by transmission costs only and excluding transmission costs; and sub-totals for transmission costs and non-transmission costs have been added to the schedule.

V. UPC COSTS AND REVENUES

Q. Has UPC prepared an accounting of the costs and revenues to UPC under the CRP and the ASC?

A. Yes. Schedule LSG-4 provides this accounting for the period beginning August 2016 through April 2018. UPC bills UES estimates of the CRP and ASC on the 25th of the month for the upcoming month. The estimated expenses are trued-up to actual expenses on a two-month lag basis. In order to calculate the true-up, UPC tracks the actual expenses, which comprise both the CRP and the ASC. These actual expenses are compared to the estimated expenses to calculate the true-up for prior period. Schedule LSG-4 provides summary data of actual CRP and ASC expenses and revenues.

VI. CONCLUSION

Q. Does that conclude your testimony?

A. Yes, it does.