

BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

UNITIL ENERGY SYSTEMS, INC.

TESTIMONY OF
CINDY CARROLL

IN SUPPORT OF UNITIL ELETRIC SYSTEMS, INC.
REQUEST FOR TARIFF CHANGE AND APPROVAL TO MAKE AN ENERGY
EFFICIENCY LOAN TO THE CITY OF CONCORD

New Hampshire Public Utilities Commission

Docket No. DE 20-___

June 16, 2020

1 **Q. Please state your name and business address.**

2 A. Cindy Carroll, 325 West Road, Portsmouth, NH 03833.

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

4 A. I am employed by Unitil Service Corp. as the Vice President of Customer Energy
5 Solutions at Unitil Service Corp. (“Unitil Service”), an affiliate of Unitil Energy
6 Systems, Inc. (“Unitil” or the “Company”). Unitil Service provides, at cost, a
7 variety of administrative, managerial and professional services on a centralized
8 basis to its affiliates, including Unitil. My primary responsibilities are the
9 development, implementation, and advancement of Unitil's distribution utilities’
10 business expansion and economic development programs, energy efficiency
11 programs, and critical customer management.

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

14 A. Yes, I have testified before the Commission on numerous occasions on behalf of
15 Unitil Energy Systems, Inc. and Northern Utilities, Inc.

16 **Q. What is the purpose of your testimony?**

17 A. My testimony supports the request of Unitil Energy Systems, Inc. (“Unitil” or the
18 “Company”) for approval to amend its Non-Residential Energy Efficiency Loan
19 Program tariff (“Non-Residential EELP Tariff”). Unitil’s proposed amendments
20 would enable the Company to (a) seek approval from the Commission to loan
21 more than \$50,000 per project and (b) seek approval from the Commission to loan

1 more than \$150,000 to a single customer in a given year regardless of whether
2 loans have been granted to other customers. The Company also seeks approval to
3 make a one-time loan to the City of Concord in an amount up to \$325,000
4 pursuant to the amended tariff in connection with the City's planned conversion
5 of its existing streetlights to energy-efficient LED fixtures.

6 **I. PROPOSED AMENDMENTS TO UNITIL'S NON-RESIDENTIAL EELP**
7 **TARIFF**

8 **Q. Please explain the history of Unitil's Non-Residential EELP Tariff.**

9 A. Unitil's energy efficiency loan program was established in 2010 pursuant to a
10 grant award from the Greenhouse Gas Emissions Reduction Fund providing
11 \$750,000 to the Company for a revolving loan mechanism to support on-bill
12 financing for customers to install energy efficiency measures. The Company's
13 energy efficiency loan program was initially limited to residential and municipal
14 customers but was expanded in 2011 to include non-residential commercial and
15 industrial customers and increase the maximum loan amount available to
16 customers per year. Unitil's Non-Residential EELP Tariff has not been amended
17 since the expansion became effective on November 1, 2011.

18 **Q. What are the current limitations on loan amounts in the Company's Non-**
19 **Residential Energy Efficiency Loan Program?**

20 A. The Company's currently effective Non-Residential EELP Tariff allows
21 municipal and commercial and industrial customers installing energy efficiency

1 measures under a Commission-approved energy efficiency program to borrow all
2 or a portion of the customer’s share of the installed cost of the energy efficiency
3 measures through an additional charge on their monthly electric service bill. The
4 “Customer Loan Amount” must be at least \$500 and less than or equal to \$50,000
5 per project and must not exceed the Customer’s share of the installed cost of the
6 energy efficiency measures. A single customer is limited to \$150,000 per year in
7 loan funds, with no limit on the number of projects. However, “[i]f at any point
8 there are no loan fund recipients or there have been no loan fund recipients in a
9 given year, the Company may petition the Commission to allow a particular
10 customer to receive more than \$150,000 in loan funds in a given year.”

11 **Q. Is the Company proposing to increase the per-project or per-customer limits**
12 **at this time?**

13 A. No. The Company’s proposed tariff amendments retain the \$50,000 per-project
14 and \$150,000 per-customer per-year caps. The Company’s proposed amendments
15 allow the Company more flexibility to request Commission permission to exceed
16 those caps on a case-by-case basis.

17 **Q. Please describe the Company’s proposed amendments to its Non-Residential**
18 **EELP Tariff**

19 A. The Company’s currently effective Non-Residential EELP Tariff allows the
20 Company to request Commission permission to loan a customer in excess of
21 \$150,000 per-year, but only when “there are no loan fund recipients or there have

1 been no loan fund recipients in a given year.” The tariff prescribes no process
2 whereby the Company may request permission to exceed the \$50,000 per-project
3 limit. Until’s proposed amendments to the tariff, if approved, would remove the
4 condition upon requesting Commission permission to exceed the \$150,000 per-
5 customer per-year cap, and would allow the Company to request Commission
6 permission to loan a customer more than \$50,000 per project.

7 **Q. Please explain why the Company’s proposed tariff amendments are**
8 **necessary.**

9 A. Until’s ability to request Commission permission to exceed the \$150,000 per-
10 customer per-year cap is currently conditional; the Company may only make such
11 a request when “there are no loan fund recipients or there have been no loan fund
12 recipients in a given year.” This condition is unnecessarily restrictive, and there is
13 no practical nexus between the number of loan recipients in a given year and the
14 ability for the Company to seek the Commission’s permission to grant a loan in
15 excess of the per-customer cap when there is good reason to do so. While the fact
16 that there have been multiple loan fund recipients in a given year may be relevant
17 to the Commission’s consideration of a request by the Company to exceed the
18 \$150,000 per-customer cap, it should not preclude the Company from being able
19 to make that request. For example, in a given year, Until may have ample
20 available funds and good reason to seek permission to loan a customer more than
21 \$150,000 for energy efficiency projects. If the Company has not made any other

1 loans during the year, it is free to seek such permission from the Commission.
2 However, if the Company has made a single loan for \$1,000 during the year, the
3 Company may not seek such permission from the Commission. As a practical
4 matter, this result is arbitrary and inefficient, and the condition should be removed
5 from the tariff.

6 Similarly, the tariff currently gives the Company the discretion to loan up to
7 \$50,000 for a qualifying energy efficiency project, but does not allow the
8 Company to seek the Commission's permission to provide a loan in excess of that
9 amount. This, too, is unnecessarily restrictive. As explained in more detail below,
10 on-bill financing in excess of \$50,000 can make a meritorious energy efficiency
11 project more feasible or attractive to a municipal or commercial and industrial
12 customer. The Company should have the ability to seek the Commission's
13 permission to loan more than \$50,000 for a single project; without this ability,
14 customers may not be able to pursue significant and valuable energy efficiency
15 projects that are viable or more attractive with an on-bill financing option. There
16 is no reason to restrict the Non-Residential Energy Efficiency Loan Program in
17 this way.

18 **Q. Why are the Company's proposed tariff amendments reasonable?**

19 A. Unitil is not proposing to increase the limits of its discretion to make loans under
20 the Non-Residential EELP Tariff without the Commission's permission.
21 Customer loan amounts would still be capped at \$50,000 per project, and

1 customers would be limited to \$150,000 in loan funds per year (irrespective of the
2 number of projects). As amended, the Non-Residential EELP Tariff would simply
3 allow the Company to seek the Commission’s permission to exceed those caps on
4 a case-by-case basis, regardless of whether there were other loan fund recipients
5 in a given year. The amendments would give the Company more flexibility to
6 make on-bill financing available for significant energy efficiency projects while
7 retaining Commission oversight and approval for projects that exceed the
8 established caps.

9 **Q. Have you provided tariff pages incorporating the proposed amendments to**
10 **the Non-Residential EELP Tariff?**

11 A. Yes. Clean and red-lined tariff pages with the proposed changes have been
12 provided as “Second Revised Page 112 (Clean)” and “Second Revised Page 112
13 (Redline).”

14 **II. CITY OF CONCORD STREETLIGHT CONVERSION PROJECT**

15 **Q. Is the Company making a concurrent request to provide an energy efficiency**
16 **loan in excess of the \$50,000 per-project and \$150,000 per-customer caps?**

17 A. Yes. In addition to amending the Non-Residential EELP Tariff, the Company
18 requests that the Commission allow the Company to loan up to \$325,000 to the
19 City of Concord (the “City”) to enable the City to convert its existing streetlights
20 to energy efficient LED fixtures. This amount would be in excess of the \$50,000
21 per-project limit and the \$150,000 per-customer limit, and such would require

1 Commission approval under the Company's proposed amended Non-Residential
2 EELP Tariff.

3 **Q. Please describe the streetlight conversion project that would be partially**
4 **funded by an EELP loan.**

5 A. The City intends to replace its existing outdoor lighting fixtures with energy
6 efficient LED fixtures pursuant to the Company's Light Emitting Diode Outdoor
7 Lighting Service Schedule LED ("Schedule LED"). The project would entail the
8 City purchasing LED fixtures to replace outdoor lighting fixtures and installing
9 such fixtures on poles owned by the Company. Until has entered into a non-
10 binding Memorandum of Understanding with the City outlining the project and
11 the proposed associated funding, a copy of which is attached to my testimony as
12 Exhibit CC-2.

13 **Q. What is the projected benefit-cost ratio of the conversion project?**

14 A. Applying the Granite State Test approved by the Commission in Order 26,322
15 (December 30, 2019), the benefit-cost ratio is 2.0. Applying the total resource cost
16 test, in which all costs, including customer costs, and all benefits, including non-
17 energy impacts, the B/C ratio is 1.1. These benefit-cost ratios indicate a favorable
18 project.

19

1 **Q. What is the Company's proposal to provide an energy efficiency loan and on-**
2 **bill financing through the Non-Residential EELP Tariff for this project?**

3 A. Unitil is willing to provide an incentive amount of up to 50% of the installed cost
4 of the LED fixtures or \$325,000, whichever is less, contingent upon the City
5 applying for such incentive and the availability of funding. Unitil proposes to loan
6 the City up to 50% of the remaining installed cost of the LED fixtures or
7 \$325,000, whichever is less, to be paid back over a term not to exceed 120
8 months. Pursuant to the Non-Residential EELP tariff, the amount of the loan
9 would not exceed the City's share of the installed cost of the LED fixtures.
10 Because this maximum amount exceeds the \$50,000 per-project cap and the
11 \$150,000 per-customer cap under the amended Non-Residential EELP Tariff, the
12 Company requests the Commission's permission to provide the loan to the City in
13 this limited instance.

14 **Q. If approved, would the loan to the City impact the Company's ability to**
15 **make loans to other customers under the Non-Residential EELP Tariff?**

16 A. Based on historical lending patterns and trends, Unitil is confident that providing
17 a loan of up to \$325,000 to the City in this limited instance will not prejudice the
18 Company's ability to make loans under the Non-Residential EELP Tariff to other
19 customers. As of June 4, the Company's revolving loan fund balance is
20 approximately \$800,000 of that amount, approximately \$540,000 is available to
21 fund energy efficiency projects under the Non-Residential EELP Tariff. Thus,

1 even if the Company loans a maximum amount of \$325,000 to the City in
2 connection with the streetlight conversion project, approximately \$220,000 will
3 remain to fund additional energy efficiency projects.

4 To date, the Company has made three loans to customers under the Non-
5 Residential EELP Tariff in 2020 for a total of \$17,000. Historically, the Company
6 has loaned, on average, approximately \$54,820 per year¹ (or approximately
7 \$4,568 per month) in 2016 - 2019 under the non-residential program, which
8 currently replenishes at a rate of approximately \$7,000 per month from customer
9 repayments.² As such, the Company does not anticipate that providing a \$325,000
10 loan to the City for repayment using the on-bill financing mechanism will impact
11 the Company's ability to provide loans for any other qualifying energy efficiency
12 projects.

13 **Q. Does the Company anticipate making similar requests to fund streetlight**
14 **conversion projects in the future?**

15 A. To date, no other municipalities in Unitil's service territory have funded
16 streetlight conversions using the on-bill financing program. However, it is
17 possible that other municipalities may seek on-bill financing for streetlight
18 conversion projects in the future. It is also possible that the proposed funding for

¹ \$61,210 in 2016; \$61,392 in 2017; \$68,412 in 2018; and \$28,265 in 2019.

² This does not include the monthly amount that the Company would receive in repayment of the proposed loan to the City of Concord.

1 such projects may exceed the \$50,000 per-project or \$150,000 per-customer caps,
2 and therefore require Commission approval. However, the City of Concord is, by
3 a considerable margin, the Company's largest street lighting customer. Any
4 potential future streetlight conversion project that may be funded through an
5 EELP loan will therefore require a lower level of funding and would not
6 negatively impact the Company's ability to make EELP loans to interested
7 customers for qualifying projects.

8 **Q. Does this conclude your testimony?**

9 A. Yes.