

UNITIL ENERGY SYSTEMS, INC.

PROPOSED RENEWABLE ENERGY SOURCE OPTION

DIRECT TESTIMONY OF

Robert S. Furino

New Hampshire Public Utilities Commission

Docket No. DE 09-_____

November 10, 2009

1 **I. INTRODUCTION**

2 **Q. Please state your name, position and business address.**

3 A. My name is Robert S. Furino. My business address is 6 Liberty Lane West, Hampton, New
4 Hampshire 03842. I am employed by Unitil Service Corp. (the "Service Company") as Director
5 of the Energy Contracts department. The Service Company provides professional services to
6 Unitil Energy Systems, Inc. ("UES").

7
8 **Q. Please briefly describe your educational and business experience.**

9 A. I received my Bachelor of Arts degree in Economics from the University of Maine in 1991. I
10 joined the Service Company in March 1994 as an Associate DSM Analyst in the Regulatory
11 Services Department and have worked in the Regulatory, Product Development, Finance and
12 Energy Contracts departments. Currently, my primary responsibilities involve energy supply
13 acquisition.

14
15 **Q. Have you previously testified before the New Hampshire Public Utilities Commission**
16 **("Commission")?**

17 A. Yes. I have testified before the Commission on several occasions.

18
19 **Q. What is the purpose of your testimony in this proceeding?**

20 A. The purpose of my testimony is to present and explain the proposed renewable energy source
21 option which, if approved by the Commission, UES will offer to its customers.

22
23 **II. BACKGROUND**

24 **Q. Why is UES filing a renewable energy source option at this time?**

1 A. UES is filing a renewable energy source option at this time in response to the recent repeal and
2 re-enactment of RSA 374-F:3, V(f), which, among other things, requires electric utilities to
3 offer its customers one or more renewable energy source options. In addition, offering a
4 renewable energy source option is consistent with Unitil's commitment to supporting New
5 Hampshire's renewable energy goals, protecting New Hampshire's environment and supporting
6 renewable generation options in New Hampshire and region.

7
8 **Q. What were UES' key considerations in developing the proposed renewable energy source**
9 **option?**

10 A. UES considered the following objectives while developing the proposed renewable energy source
11 option:

- 12 (1) To support the market for new renewable energy sources of generation within New England,
13 or deliverable to New England;
- 14 (2) To be conceptually straightforward and easy to understand from a customer's perspective;
- 15 (3) To focus on residential and small business customers who have limited access to competitive
16 suppliers of energy, including renewable energy source options;
- 17 (4) To provide options which are affordable enough to encourage participation;
- 18 (5) To have no impact on UES' wholesale default service power supply arrangements;
- 19 (6) To minimize changes required to Unitil's existing billing systems so that implementation may
20 begin in a reasonable amount of time after receipt of Commission approval;
- 21 (7) To avoid unnecessary expenditures and unreasonable administrative burdens: and
- 22 (8) To provide an opportunity to learn about customers' willingness to financially support
23 renewable energy sources.
- 24

1 **III. PROGRAM DESCRIPTION**

2 **Q. Please briefly describe UES' proposed renewable energy source option.**

3 A. UES proposes to introduce an optional service to residential and small business customers
4 entitled the "Renewable Source Option" ("RSO"). Under UES' proposed RSO program, eligible
5 UES default service customers would have an opportunity to support qualified renewable source
6 generation in New England. On behalf of the participating customers, UES would purchase and
7 retire renewable energy certificates ("REC") from qualified renewable sources of generation
8 either located in New England or deliverable to New England that match either all or a portion of
9 the customers' actual energy use. A customer who chooses to participate in the RSO program
10 will be billed a charge (in cents per kilowatt-hour) based on the renewable option chosen. The
11 RSO charge would show as an additional line item on the customer's bill and would be separate
12 from the charge for default service energy supply.

13

14 **Q. Please describe the options that would be available to customers under UES' proposed RSO**
15 **program.**

16 A. Eligible default service customers would have the opportunity to choose from three RSO levels of
17 participation: a 25% option, a 50% option and a 100% option. For customers who choose the
18 25% option, UES would purchase and retire RECs to match 25% of the customer's actual
19 electricity consumption. Similarly, for the 50% option, UES would purchase and retire RECs to
20 match 50% of the customer's actual electricity consumption, and for customer's who choose the
21 100% option UES would purchase and retire RECs to match 100% of the customer's actual
22 electricity consumption.

23

24 **Q. Is the RSO program available to all of UES' customers?**

1 A. No. The RSO program would only be available to domestic service (Rate Class D) and regular
2 general service (Rate Class G2) customers who receive their electricity under UES' Default
3 Service tariff and who are not enrolled in UES' Low-Income Electric Assistance Program ("LI-
4 EAP") or approved to receive payment assistance through the Fuel Assistance Program ("FAP")
5 administered by a Community Action Agency.

6

7 **Q. Why isn't the RSO available to customers who are enrolled in UES' Low-Income Electric**
8 **Assistance Program or to customers approved to receive electric service payment assistance**
9 **through the Fuel Assistance Program administered by a Community Action Agency?**

10 A. There is currently a waiting list for new customers to enroll in UES' LI-EAP since enrollment
11 into the program is limited. It is UES' belief that this fund is limited and that introducing an
12 additional charge for the RSO program would further burden this fund, and thereby reduce the
13 availability of this resource to other customers on the waiting list. UES also understands that the
14 FAP is similarly limited in funding and that FAP is meant to assist eligible customers in meeting
15 their basic energy needs. Because both of these programs have limited funding available and the
16 additional cost of participating in the proposed RSO program would further limit the availability
17 of funds, UES proposes that the RSO program not be available to customers who participate in
18 either LI-EAP or FAP.

19

20 **Q. Why isn't the RSO program available to large general service (Rate Class G1) customers or**
21 **outdoor light service (Rate Class OL) accounts who receive default service energy supply?**

22 A. UES believes that its large general service (Rate Class G1) customers have significant access to
23 the competitive retail market for energy supply and various other services such as renewable
24 source generation. This market access is demonstrated by the most recent Customer Migration
25 Report, filed by the Company as part of its most recent Default Service filing on August 28, 2009,

1 and attached hereto as Attachment 1. The report shows that during the past twelve months the
2 percentage of G1 sales requirements provided by competitive suppliers has ranged from sixty
3 percent (60%) to seventy-nine percent (79%). In addition, excluding G1 customers from the
4 RSO program simplifies the rate setting and reconciliation processes. Since RECs are wholesale
5 products that are tracked and traded on the regional transmission network, an adjustment must be
6 made to account for distribution losses between the Company's wholesale tie points and customer
7 meters in order to determine the proper number of RECs to acquire. Distribution losses of non-
8 G1 customers are approximately forty percent (40%) higher than those of G1 customers.

9 Limiting the program to non-G1 customers avoids the need to make assumptions about the
10 relative composition of non-G1 and G1 RSO loads in order to establish a single set of RSO rates.
11 From a reconciliation perspective, UES maintains separate reconciliation mechanisms for its non-
12 G1 and G1 customers. Limiting the program to non-G1 customers avoids the need to allocate
13 balances between the two classes when reconciling actual and expected costs and revenues.

14
15 UES proposes to restrict OL accounts from the RSO program for the following reasons. First,
16 significant modifications to the Company's billing system would be required due to the manner in
17 which the system processes and bills charges associated with OL services. Secondly, charges
18 associated with OL services are not generally billed as stand alone customers but are represented
19 as an additional service provided to governmental bodies and private customers who take their
20 primary service under another rate schedule (typically Rate Class G1 or G2). To put consumption
21 associated with the OL service into perspective, OL sales represent approximately three-quarters
22 of one percent (0.75%) of the Company's total sales, a good portion of which is believed to be
23 associated with G1 customers. Restricting OL accounts from the RSO program would not
24 prevent an otherwise eligible customer from participating under its primary account and would
25 allow UES to more efficiently manage program implementation.

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Q. Why isn't the RSO program available to customers receiving their electricity through competitive suppliers?

A. Customers who receive their electricity from competitive suppliers already have access to competitive energy supply markets and therefore could contract for renewable energy from suppliers directly. UES' RSO program is aimed at providing access to those customers who have limited access to competitive suppliers of energy – namely residential and small businesses.

Q. How long is a customer required to take service under the RSO program once they are enrolled?

A. There is no required length of time commitment. Customers may enroll in and drop from the RSO program on a billing cycle basis. For example, if an eligible customer enrolls in the program on August 1st and their next meter read date is August 15th, then the service will begin on August 15th. The customer's bill for the billing cycle ending with their next cycle reading (i.e. September 15th) will include the first RSO charge, which would be based on consumption from August 15th through September 15th in this example. If this same customer subsequently contacts UES on September 30th to drop from the program, the drop would become effective with their next cycle reading (i.e. October 15th). The customer's bill for the billing cycle ending October 15th in this example will include the last RSO charge, which would reflect consumption from September 15th through October 15th. Customers who become enrolled in UES' Low-Income Electric Assistance Program or a Fuel Assistance Program administered by a Community Action Agency will be removed from the RSO program. Lastly, a customer who moves to competitive energy supply or who receives electricity directly from ISO-NE will also be removed from the RSO program.

1 **Q. How can a customer enroll in and drop from the RSO program?**

2 A. Customers can enroll in and drop from the RSO program by either calling UES' customer service
3 call center or by electronically submitting requests through Unitil's website. UES will attempt to
4 process all requests that come in through the website within 2 business days. Therefore, a
5 customer who chooses to submit an enrollment or a drop request must do so at least 2 business
6 days prior to their next scheduled read date for request to take effect on the next read date.

7

8 **Q. Are there any requirements for a minimum number of customers or a minimum amount of**
9 **load that must choose to participate in the RSO program in order for UES to offer the RSO**
10 **program?**

11 A. Although RSA 374-F:3 V(f)(10) does include a provision that allows utilities, with Commission
12 approval, to require a minimum amount of customers or a minimum amount of load to participate
13 in the program in order for the program to be in effect, UES' proposal does not require such
14 minimums.

15

16 **Q. Please describe how UES' proposed method of purchasing RECs through its RSO program**
17 **satisfies the requirement that electric utilities offer a renewable energy source option.**

18 A. A renewable energy certificate ("REC") is a tradable commodity with specific environmental
19 attributes that represent one megawatt-hour (or one thousand kilowatt-hours) of electricity that
20 was generated from a specific renewable resource, such as wind or solar power. These
21 certificates are initially the property of the resource owner (the wind farm owner or the solar
22 panel owner in this example), but can later be sold and traded until such time that the REC must
23 be removed from circulation, i.e. "retired." The last owner of a retired REC can claim to have
24 purchased renewable energy. Therefore, the practice of purchasing RECs in sufficient quantity to
25 match the aggregated enrolled customer consumption, in proportion to their RSO selection (25%,

1 50% or 100%), meets the requirements to offer a renewable source option. In addition, the sale of
2 RECs provides an additional source of income to owners of renewable resource generation over
3 and above the price paid for the power generated by the renewable resource. This additional
4 income stream helps to stimulate investment in new renewable sources of generation that would
5 likely not exist without a viable REC market. Lastly, RECs are a widely-used and accepted
6 method of tracking and validating the environmental attributes of renewable generation resources.

7
8 **Q. How will the RECs be tracked and validated?**

9 A. UES proposes to use the New England Power Pool Generation Information System (NEPOOL
10 GIS) to track and validate its acquisition and retirement of RECs. This system includes a
11 generation system database and certificate system that accounts for the generation attributes of
12 each megawatt-hour of electricity generated within New England. The NEPOOL GIS is widely
13 accepted by various New England state utility regulatory commissions as a method to
14 demonstrate compliance with state renewable portfolio standards, including the New Hampshire
15 standard (RSA 362-F:8).

16
17 **Q. What types or classes of RECs will UES purchase and retire on behalf of its customers who
18 choose to enroll in the proposed RSO program?**

19 A. UES proposes to purchase both Class I and Class II RECs from facilities that are certified by the
20 Commission as Class I or Class II generation resources under the New Hampshire Electric
21 Renewable Portfolio Standard (“RPS”) (RSA 362-F:4.I). UES plans to purchase Class I and
22 Class II RECs in proportion to the respective requirements established in the New Hampshire
23 Code of Administrative Rules Chapter Puc 2500 (“Puc 2500”) for these types of RECs in a given
24 calendar year. Attachment 2 provides a table which presents the Class I and Class II annual RPS
25 percentage requirements and shows the respective percentage of each type of REC UES would

1 acquire under the proposed RSO program. For example, for 2010 UES would purchase ninety-
2 six percent (96%) as Class I RECs and four percent (4%) as Class II RECs to match the combined
3 actual consumption of the customers that chose to participate in the proposed RSO program.
4 Examples of Class I generation resources include wind energy; geothermal energy; hydrogen
5 derived from biomass fuels or methane gas; ocean thermal, wave, current or tidal energy;
6 methane gas or biomass. Class II generation resources are defined as solar technologies that
7 began operation after January 1, 2006. Since the RSO program is intended to promote investment
8 in new renewable generation, UES does not propose to incorporate Class III or Class IV RECs,
9 which both involve generation that was built before 2006.

10
11 **Q. Will the kilowatt-hour usage of customers taking service under the RSO program continue**
12 **to be included in the calculation of UES' obligations under the Electric Renewable Portfolio**
13 **Standard (RSA 362-F)?**

14 A. Yes. The obligation to purchase Class I and Class II RECs under the RSO program will be
15 entirely incremental to UES' obligations under the Electric Renewable Portfolio Standard. As a
16 result, there will be no doubt that the implementation of the RSO program will provide increased
17 support of renewable energy in New England.

18
19 **IV. RATE SETTING AND COST RECOVERY MECHANISM**

20 **Q. How will the rates be established for each option under the RSO program?**

21 A. UES proposes to utilize the same REC price assumptions that it provides as the RPS compliance
22 cost estimates in its Default Service rate filings for non-G1 customers. An example of the REC
23 price assumptions, taken from UES' most recent Default Service filing, is provided as
24 Attachment 3. These cost assumptions reflect UES' best estimates of the market value of the
25 different types of RECs at the time of the filing. The estimates are based upon recent market

1 experience, quotes from brokers of renewable energy products and the applicable alternative
2 compliance payment (ACP) prices. UES proposes to purchase Class I and Class II RECs as
3 needed to demonstrate performance under the RSO program through the same processes under
4 which it will acquire RECs for RPS compliance and in accordance with the RECs procurement
5 Settlement Agreement approved by the Commission in Docket No. DE 09-009. As a result, the
6 actual costs per Class I REC and Class II REC paid under the RSO program is expected to be the
7 same as that paid to demonstrate RPS compliance.

8
9 The RSO charge would be specified in dollars per kilowatt-hour for each RSO option. The 100%
10 RSO charge would be calculated as the weighted average cost of Class I and Class II RECs,
11 according to the percentages shown in Attachment 2, adjusted for non-G1 distribution losses.
12 The 50% RSO charge would be one-half of the 100% RSO charge and the 25% RSO charge
13 would be one-quarter of the 100% RSO charge.

14
15 **Q. How often will the RSO charges change?**

16 A. UES will propose new RSO charges when it files its proposed non-G1 Default Service rates for
17 effect each May 1st and November 1st.

18
19 **Q. Other than the cost of purchasing Class I and Class II RECs, will UES incur costs to design,
20 implement, promote and administer the RSO program?**

21 A. Yes. UES estimates that both internal resources and outside services and materials will be
22 required to design, promote and administer the RSO program. Internal costs will be incurred for
23 such activities as performing upgrades to the existing billing system, providing training to
24 customer service representatives, tracking and reporting program results, and overseeing
25 outsourced activities. UES proposes to perform necessary internal administrative activities with

1 existing resources. Cost estimates for outsourced services and materials associated with program
2 startup and first year costs are summarized below:

3	Bill Inserts:	\$10,000
4	Unitil Website Changes:	\$5,000
5	Promotion:	\$10,300
6	Customer Communication:	\$20,000
7	Total	\$45,300

8 UES proposes to cap start up and first year administrative costs associated with the RSO program
9 at \$50,000, which excludes the cost of RECs. The expected yearly ongoing promotion and
10 customer communication costs are anticipated to be no more than \$20,000 per year. Further
11 detail of the marketing and customer communication activities is provided in Section VI, below.
12

13 **Q. How does UES plan to recover the incremental administrative costs summarized above?**

14 A. The Electric Utility Restructuring Policy Principles (RSA 374-F:3, V(f)(2)) states, “Costs
15 associated with selecting an RES option should be paid for by those customers choosing to take
16 such option. A utility may recover all prudently incurred administrative costs of RES options
17 from all customers, as approved by the Commission.” UES proposes to recover the incremental
18 administrative costs of the RSO program associated with outsourced services and materials from
19 all customers through its External Delivery Charge (“EDC”). Since the RSO program will
20 benefit all customers by increasing the level of financial support for new renewable generation
21 sources in New England and by increasing awareness of the health and environmental benefits of
22 new renewable generation sources, it is appropriate to recover the administrative costs of this rate
23 from all customers.
24

25 **Q. How will over-collections and under-collections for the RSO program be reconciled?**

1 A. As part of its annual reconciliation of Default Service Charges each year, UES will file with the
2 Commission a reconciliation of revenues and expenses for the RSO program for the previous
3 period. UES proposes to include any over- or under-collection associated with the RSO program
4 in its non-G1 Default Service Charge.

5
6 **V. COMPLIANCE REPORTING**

7 **Q. Does UES propose to perform its obligations under the RSO program in accordance with**
8 **the provisions of Puc 2500?**

9 A. Yes. UES proposes to perform its obligations under the RSO program in accordance with the
10 provisions of the Electric Renewable Portfolio Standard established in Puc 2500. As such, UES
11 would rely on the Commission's approval qualifying specific renewable generators as eligible to
12 provide Class I or Class II RECs, including their satisfaction of all applicable requirements such
13 as location within, or deliverability to, New England. In addition, UES proposes to avail itself of
14 the provisions therein allowing the satisfaction of up to thirty percent (30%) of one calendar
15 year's REC obligations with RECs produced in either of the previous two calendar years or
16 during the first quarter of the subsequent calendar year. Similarly, UES proposes to avail itself of
17 the Alternative Compliance Payment ("ACP") provision and make payment to the Renewable
18 Energy Fund if there are not enough Class I or Class II RECs available to purchase from the
19 market at lower cost.

20
21 **Q. How will UES demonstrate to the Commission that the appropriate quantity and type of**
22 **RECs have been retired by UES on behalf of the participating customers?**

23 A. UES proposes to demonstrate satisfaction of RSO obligations in the same manner as it
24 demonstrates compliance with RPS requirements. Puc 2500 requires each provider of electricity
25 to submit an annual compliance filing by July 1st of each year to the Commission to document

1 compliance with the Electric Renewable Portfolio Standards for the preceding calendar year.
2 UES proposes to supplement its RPS compliance filing with a performance report demonstrating
3 that the appropriate quantity and type of RECs were acquired and retired specifically for the RSO
4 program, thereby demonstrating compliance under RSA 374-F:3, V(f)(7). In addition to this
5 performance report, UES proposes to submit to the Commission with each quarterly Default
6 Service filing a report on RSO program activity.

7
8 **Q. What information does UES propose to include in its quarterly reports?**

9 A. The quarterly reports would include the number of customers participating in the program by rate
10 class and RSO option chosen. The reports would also include the kilowatt-hour consumption of
11 participating customers by rate class and RSO option and provide the aggregate quantity of Class
12 I and Class II RECs that will be purchased as a result of the program and an estimate of the
13 projected annual revenue generated under the program (which would ultimately go to fund
14 renewable generation) along with a brief description of market activity. The Company believes
15 the information gleaned from these reports will provide an opportunity to learn about customer
16 interest in supporting new technologies that have the potential to benefit the environment and
17 reduce our reliability on imported fuels.

18
19 **VI. MARKETING AND CUSTOMER COMMUNICATIONS**

20 **Q. Please describe UES' plans for marketing the RSO program.**

21 A. UES plans to promote the RSO program to its customers through several existing
22 communications channels, including (1) bill inserts, (2) specific bill messages, (3) Interactive
23 Voice Recording (IVR) messaging, (4) customer service/call center messaging, (5) a dedicated
24 website page on the Unitil.com website, (6) press releases and public service announcements, and
25 (7) inclusion in presentations given at community outreach events. Communications will

1 highlight the health and environmental benefits associated with the RSO program, as requested in
2 RSA 374-F:3, V(f)(6), as well as the benefits of reduced reliability on foreign fuels. As
3 mentioned previously, UES proposes to cap the start up and first year costs associated with the
4 design, promotion, implementation and administrative of the RSO program, excluding REC
5 purchases (or payments to the Renewable Energy Fund in lieu of REC purchases), at \$50,000 and
6 yearly ongoing promotional and customer communication costs are estimated at \$20,000
7 annually. Also as previously discussed, UES proposes to recover these expenses from all
8 customers under its External Delivery Charge.

9
10 **Q. Does UES have any additional plans for RSO program customer communications?**

11 A. Yes. UES plans to provide each customer who enrolls in the RSO program with a “Be a Good
12 Green Neighbor” welcome package that includes tools for customers to promote their decision
13 and encourage others to join them. Each customer who signs up for the program would receive a
14 letter from the Company with an offer for a free “pass the word” kit that includes: a bumper
15 sticker or window decal that states “My house is powered by renewable energy” along with a call
16 to action to visit unitil.com; “pass the word” post-cards to be mailed or dropped off to neighbors;
17 and a series of on-line tools such as an electronic “badge” that can be placed on a website or
18 Facebook page. This kit could down loaded and printed or mailed depending upon customer
19 request. Unitil may also partner with like-minded organizations to cross promote the RSO
20 program on their websites and at their events.

21
22 **VII. INITIAL ESTIMATE OF RSO RATE**

23 **Q. Is UES proposing specific RSO charges at this time?**

24 A. No. UES will formally propose a charge before the hearing in this docket.
25

1 **Q. Has UES performed a preliminary calculation of the RSO charges based on recent market**
2 **prices for Class I and Class II RECs?**

3 A. Yes. UES' estimates of the market value of Class I and Class II RECs taken from its most recent
4 Default Service filing, provided as Attachment 2, are \$55 per Class I REC and \$80 per Class II
5 REC. Attachment 4 provides a preliminary calculation of the RSO charges. These preliminary
6 charges are approximately 6.0 cents per kilowatt-hour for the 100% RSO option, 3.0 cents for the
7 50% RSO option and 1.5 cents per kilowatt-hour for the 25% RSO option.

8

9 **Q. Using the preliminary RSO charges, please estimate the incremental monthly bill impact of**
10 **the RSO options for a residential customer using mean and median kilowatt-hour usage per**
11 **month and for a small business customer using 3,000 kilowatt-hours per month.**

12 A. The incremental monthly bill impact of the RSO for a residential customer using 662 kilowatt-
13 hours per month (mean), for a residential customer using 553 kilowatt-hours per month (median)
14 and for a small business customer using 3,000 kilowatt-hours per month are summarized in
15 Attachment 4. As shown, the monthly bill impact for a residential customer using 662 kilowatt-
16 hours per month ranges from \$9.85 per month for the 25% option to \$39.42 per month for the
17 100% option, and ranges from \$8.23 per month for the 25% option to \$32.93 per month for the
18 100% option for a residential customer using 553 kilowatt-hours per month. The bill impact for a
19 small business customer using 3,000 kilowatt-hours per month ranges from \$44.66 per month for
20 the 25% option to \$178.63 per month for the 100% option.

21

22 **VIII. PROPOSED TARIFF AND EFFECTIVE DATE**

23 **Q. Has UES included proposed tariff language for the RSO program proposed in this filing?**

24 A. Yes. UES' proposed tariff language is contained in Attachment 5, which includes a proposed
25 RSO tariff schedule and proposed changes to the Default Service tariff schedule to provide for

1 inclusion of over- or under- collections resulting from the RSO program in the annual non-G1
2 default service reconciliation and proposed changes to the External Delivery Charge tariff
3 schedule to include the recovery of outside services expenses associated with RSO program
4 administration.

5

6 **Q. What is the proposed initial effective date for the RSO rate?**

7 A. UES proposes to implement the RSO charge approximately 16 weeks after obtaining Commission
8 approval. If an order approving the proposal is received in early January 2010, UES would
9 expect to implement the program by May 1, 2010.

10

11 **Q. Does that conclude your testimony?**

12 A. Yes, it does.