

**NORTHERN UTILITIES, INC.**

**DIRECT TESTIMONY**

**OF**

**MARK A. LAMBERT**

**EXHIBIT MAL-1**

**New Hampshire Public Utilities Commission**

**Docket No. DG 21-104**

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1           **I. INTRODUCTION**

2           **Q.     Mr. Lambert, what is your position and what are your responsibilities?**

3           A.     I am the Vice President, Customer Operations for Unitil Service Corp.  
4                (“Unitil Service” or the “Company”). Unitil Service provides, at cost, a  
5                variety of administrative and professional services, including regulatory,  
6                financial, accounting, human resources, engineering, operations, technology  
7                and energy supply management services on a centralized basis to its affiliated  
8                Unitil companies,<sup>1</sup> including Northern Utilities, Inc. (“Northern”). My  
9                responsibilities include the development, execution and operations leadership  
10              for the five customer functions provided to the utility operating companies:  
11              Customer Solutions, Quality Assurance, Accounts Receivables, Customer  
12              Billing, Regulatory Rate Compliance and Customer Revenue Reconciliation.

13          **Q.     Please describe your business and educational background.**

14          A.     I earned a Bachelor of Science degree in Business Administration  
15              Management from Plymouth State University in 1987. Following graduation,  
16              I was employed with United Parcel Service (“UPS”), working in various  
17              customer service managerial roles. I joined Unitil Service in August of 1997  
18              as the Manager of Customer Service before being promoted to Director of  
19              Customer Services in January 2000. In January 2011, I was provided with the

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<sup>1</sup> The “Unitil companies” include Unitil Service and its regulated affiliates, Unitil Energy Systems, Inc., Northern Utilities, Inc., and Fitchburg Gas and Electric Light Company, all of which are wholly-owned subsidiaries of Unitil Corporation.

1 opportunity to head up the Company's government affairs area as the  
2 Director, Government Affairs. After receiving additional responsibilities in  
3 the Customer Services area in 2017, I assumed the role of Vice President,  
4 Customer Operations in January, 2018.

5 **Q. Have you previously testified before the Commission or any other**  
6 **Regulatory agencies?**

7 A. Yes, I have testified before the Commission in previous rate case proceedings,  
8 numerous dockets and also in Unitil Corporation's proceeding regarding the  
9 acquisition of Northern Utilities, Inc. in 2008. I have also testified before the  
10 Massachusetts Department of Public Utilities and the Maine Public Utilities  
11 Commission on previous occasions in various proceedings.

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

13 A. I discuss the Company's Customer Information System ("CIS") that was  
14 implemented in July 2017 and the need to replace the Company's legacy CIS  
15 system, which had been in service for more than twenty-two years. I also  
16 discuss proposed changes to the Company's Terms and Conditions for  
17 Distribution Service.

18 **II. CUSTOMER INFORMATION SYSTEM**

19 **Q. Why did Unitil Service decide to implement a new CIS?**

20 A. Unitil Service's legacy CIS (referred to as "HTE") was implemented over a  
21 period of years from 1995 to 1998. Over the next two decades, the energy

1 industry changed rapidly as more complex energy delivery and supply options  
2 were made available to gas and electric customers and the technological avenues  
3 of communications with customers continued to evolve. As a result, HTE became  
4 functionally obsolete and unable to continue to meet current customer needs and  
5 expectations, the complexities of the Unutil companies' business, and evolving  
6 regulatory requirements.

7 **Q. Please explain how Unutil Service's CIS contributes to the Unutil companies'**  
8 **ability to provide safe, reasonable and adequate service to their customers.**

9 A. The importance of the CIS to a modern utility's provision of service is difficult to  
10 overstate. The CIS serves as the core of all of the Unutil companies' business  
11 systems and plays a functional role in nearly every aspect of the delivery of  
12 service to customers. The critical functional requirements for the CIS include, but  
13 are not limited to:

- 14 • Customer Billing and Revenue Recognition
- 15 • Cash Remittance, Cash Application and Payment Processing
- 16 • Regulatory Tariff and Rate Management
- 17 • Financial Reporting into the General Ledger
- 18 • Metering Validation and Editing
- 19 • Credit and Collections
- 20 • New Customer Intake and Service Work Orders
- 21 • Customer Communications and Customer Service
- 22 • Customer Account Portal Web Interface
- 23 • Retail Choice and Supplier Billing / Rates; and
- 24 • Future-looking Metering / Billing / Rate requirements.

1 **Q. Please describe the CIS project in more detail.**

2 A. This project was a major and critical system-wide conversion that included not  
3 only a new CIS, but also a Meter Data Management System (“MDMS”), a new  
4 “MyUnitil” customer portal, and 34 individual sub-system interfaces required to  
5 operate the CIS environments. The CIS was developed and tested over a period  
6 of five years and successfully launched into production across Unitil  
7 Corporation’s footprint in July 2017.

8 **Q. Did Unitil Service consider making improvements to its legacy CIS?**

9 A. Unitil Service concluded that updating or improving HTE was not a viable option.  
10 As discussed above, HTE was unable to keep pace with the Unitil companies’  
11 needs. Moreover, in May 2010, SunGuard (the vendor of HTE) announced the  
12 application to be end-of-life. Prior communications from the vendor had  
13 indicated a sunset date of five years after such notification, which meant that by  
14 2015 SunGuard would no longer support HTE.

15 **Q. What process did Unitil Service undertake to procure a new CIS?**

16 A. After the project team determined the scope of the CIS functionality, as discussed  
17 above, it worked with a consultant, Black & Veatch, to prepare a robust request  
18 for proposals (“RFP”) to solicit proposals for the new CIS. The RFP was  
19 distributed to fifteen different CIS vendors and two MDMS vendors in late May  
20 2012. Unitil Service received nine written proposals in response to the RFP.  
21 Unitil Service, with the assistance of Black & Veatch, conducted a comprehensive  
22 evaluation of the proposals that were received.

1 **Q. Did Until Service move forward with a CIS vendor based on its evaluation?**

2 A. Yes. At the conclusion of the comprehensive evaluation process it was  
3 recommended that the Company move forward with Harris Computers'  
4 subsidiary Systems & Software's ("S&S") enQuesta CIS product. In addition to  
5 submitting a proposal that met Until Service's needs, S&S was an attractive  
6 vendor for the CIS project for a variety of reasons. S&S's Harris affiliate,  
7 SmartWorks, had already developed a MDMS (MeterSense) that interfaced with  
8 the enQuesta CIS, and there were efficiency advantages to working with Harris  
9 companies for both CIS and MDMS.

10 **Q. After S&S was selected as the CIS vendor, how did the development of the**  
11 **new CIS proceed?**

12 A. S&S commenced the project initiation in mid-April 2013 and completed that  
13 process in early June 2013. Until Service signed a contract with S&S on May 1,  
14 2013 and the design process commenced in early June 2013 with the discovery  
15 phase. The goal of the discovery phase was to understand the "as-is" state of the  
16 Until companies' systems and to aggregate existing documentation, procedures,  
17 reports, and other artifacts, as well as document business processes. As part of  
18 this phase, in-depth review meetings were organized by each functional business  
19 area to solicit discovery feedback. The discovery phase was followed by a series  
20 of business process analysis workshops, which produced approximately 70  
21 business process and requirement documents that detailed the configuration of the  
22 new CIS and requirements for the upgrades to the related information systems.

1 **Q. Was S&S's CIS implementation monitored throughout the process?**

2 A. Yes. Although S&S served as the implementer during the early stages of the  
3 project, Unitil Service actively monitored the CIS implementation. In March  
4 2015, Company management determined that a review of the project should be  
5 conducted as a result of unexpected delays during the early part of the build  
6 phase. The review was performed by Grant Thornton, one of the nation's leading  
7 independent audit, tax and advisory firms, with which the Company had  
8 significant experience. As a result of the review, Unitil Service assumed control  
9 of the work plan for the CIS implementation. Unitil Service reorganized and  
10 supplemented its CIS team with additional resources, worked with S&S to revise  
11 its quality assurance and code review process, and obtained commitments from  
12 S&S to add resources and increase quality control. The Company then engaged  
13 Grant Thornton to assist in implementation and project management. Unitil  
14 Service determined this supplemental project management and testing expertise  
15 was necessary to adequately and independently test the CIS prior to "go-live" to  
16 ensure that the CIS launch would be successful for the Unitil companies and their  
17 customers.

18 **Q. Can you describe the testing methodology used?**

19 A. Unitil Service's standard practice when implementing new information systems is  
20 to establish a separate hardware/software "test" environment into which the base  
21 version of the vendor's (or internally developed) software is loaded in preparation



1 for custom configuration and testing in accordance with the Company's business  
2 process requirements.

3 From a project management perspective, Unitil Service tests three critical areas of  
4 the new CIS software's performance. First, it confirms that it can successfully  
5 convert all required data from the legacy system to the new system and validates  
6 and reconciles all customer, financial, regulatory and statistical attributes and  
7 information in the test environment. Second, extensive functional, transactional  
8 and system performance tests (including data uploads, detailed transactions, and  
9 daily business cycle processes) are performed to ensure the new system can  
10 perform all monthly business cycle processes according to the Unitil companies'  
11 regulatory and customer service standards. Third, the Company tests the new  
12 software/hardware's ability to close monthly operations and  
13 interface/communicate with all other necessary information systems as required.

14 **Q. Is such a comprehensive testing methodology process necessary?**

15 **A.** Yes. Comprehensive testing in a test environment to prevent errors in a  
16 production environment is far preferable to, and less expensive than, testing to  
17 detect errors after they have occurred in a production environment. This  
18 commonsense approach is a foundation of the Company's system of internal  
19 controls.

20 Application of this quality standard of preventative testing methodology is  
21 required for approval from the Company's Senior Officers prior to "go-live" with  
22 any new system. For example, the initial CIS project plan proposed to test the first

1 critical area listed above, the conversion process, four times before proceeding to  
2 “go-live” launch execution.

3 Following Unutil Service’s assumption of control and reorganization of the project  
4 in 2015-2016, the Company determined that more testing of this critical area was  
5 necessary. Ultimately, the Company performed nineteen data conversions in the  
6 test environment. The twentieth data conversion occurred, successfully, during  
7 “go-live” over the July 4<sup>th</sup> weekend in 2017. Thus, for proper implementation of  
8 this project, twenty data conversions were necessary. By investing in five times  
9 the preventative testing measures (i.e, twenty versus four), Unutil Service was able  
10 to avoid the significant expense associated with executing a poor conversion and  
11 then detecting and fixing errors while in live billing production mode, which  
12 would affect the customers we serve.

13 **Q. Were the investments in preventative testing worthwhile?**

14 **A.** Yes. The cost of “cure” attributable to error detection and correction in the  
15 production environment will always far exceed the cost of prevention in the test  
16 environment. Consider further the intangible costs associated with the  
17 inconvenience to and frustration of customers, and the resulting loss of hard-  
18 earned trust by customers, regulators and state and local officials, and the true  
19 cost of an insufficiently tested CIS implementation is nearly impossible to  
20 overstate.

21 **Q. How much testing did Unutil Service perform on the CIS prior to “go-live”?**

1    **A.**     Since many tests are not passed the first time, thousands of tests and re-tests were  
2           performed during the project. More than 200 Unitil and outside consulting  
3           personnel were involved in the development and testing of the CIS systems. The  
4           goal was to “go-live” in a manner which would have little to no disruption and  
5           impact on the customer experience. Testing is an iterative and exhaustive  
6           process. If a problem is discovered during a functional test, an attempt must be  
7           made to identify and rectify the problem, at which the time process is repeated  
8           until the system requirements are satisfied. If issues were discovered during the  
9           CIS testing process, Grant Thornton and Unitil Service worked with S&S to  
10          identify the issue, determine the solution, establish a timeline for the delivery of a  
11          revised system component for retesting, and test the component until it satisfied  
12          system requirements. Testing occurred in parallel for enQuesta (CIS), MDMS,  
13          and MyUnitil. This comprehensive testing process resulted in thousands of  
14          functional tests being conducted over approximately 36 months.

15    **Q.**     **How does the comprehensive testing and training affect the cost and schedule**  
16           **for a project of this magnitude and importance?**

17    **A.**     The importance of sufficient testing and training for a system as important as the  
18           CIS cannot be overstated. The time and expense required to comprehensively test  
19           a system of this breadth is difficult to predict at the outset because a CIS is not a  
20           “plug and play” product. A new CIS must be customized to meet a company’s  
21           business functionality needs and every aspect of that customized product must be  
22           thoroughly vetted for the reasons discussed in this testimony. Accordingly, the

1 time and expense necessary to complete testing and training are driven by factors  
2 that include the complexity of the new system and the extent to which it must  
3 interface and interact with other business platforms.

4 **Q. How does the new CIS benefit customers?**

5 A. The new CIS provides numerous benefits to customers. In addition to enhancing  
6 the Company's ability to provide efficient and accurately measured and billed  
7 service to customers, an important goal of the CIS was to meet evolving customer  
8 expectations. Customers expect more information to be made available from their  
9 utility and that the information be available through modern communications  
10 channels including web, mobile, e-mail, text and chat. The new CIS provides  
11 many such benefits to customers, including:

- 12 • Web interface that includes bill view and print access, recent billing and  
13 payment activity.
- 14 • Customers can sign-up for communication preferences for their bills and  
15 account management alerts. These communication preferences allow the  
16 customers to choose a message delivery option for paper, e-mail or SMS  
17 text message.
- 18 • Improvement in a customer's ability to read and understand bills,  
19 including rates, consumption and historical comparison tools for usage  
20 data.
- 21 • Customer bills include payment arrangement information and due dates.
- 22 • Customers can pay all their bills (including multiples) in a consolidated  
23 fashion. Unipay (Automatic Bank draft) is able to be utilized on active  
24 payment arrangements.
- 25 • Real-time payment interface with approval codes and account balance  
26 information.

- 1           • Automatic voiding of pending service turn-offs due to collection activity  
2           when a payment is made.
- 3           • The CIS has more functionality to allow Customer Service  
4           Representatives (“CSRs”) to assist with answering customer questions  
5           concerning the billing, account status and other communications.

6 **Q. How would you characterize the implementation process for the new CIS?**

7 A. After exhaustive testing and Quality Assurance/Quality Control assurance, the  
8 CIS was implemented over the 2017 Independence Day holiday without any  
9 material complications. The CIS implementation process was highly successful,  
10 has remained active, and has performed well since it was brought on line nearly  
11 four years ago. Today, the Company has a CIS that serves its customers well and  
12 is reflective of a modern-day service provider. Unutil Service understood from the  
13 beginning that the replacement of its legacy CIS with a completely new system  
14 would be a complicated undertaking and would require significant testing in a test  
15 environment before it would be allowed to function in the production  
16 environment. Unutil Service’s thorough information systems testing methodology  
17 was the key attribute to its successful CIS implementation.

18 **Q. What was the cost of the new CIS investment?**

19 A. Unutil Service invested \$36,832,636 in the CIS, MDMS, Customer  
20 Communications / Web Portal and System Interfaces projects.

21 **Q. How was the new CIS investment accounted for?**

22 A. Throughout the development process, the costs of the project were accumulated  
23 on the books of Unutil Service. In December 2017, the project was transferred

1 from Construction Work in Process (account 107) to Plant in Service (account  
2 101). At that time, the costs associated with the MDMS were transferred from  
3 Unitil Service to the Unitil operating companies. This balance was transferred  
4 because there were no material post “go-live” or Phase 2 items associated with the  
5 MDMS. At the end of 2018, it was determined that the CIS and other remaining  
6 systems had been operating effectively for 18 months, and in the first quarter of  
7 2019 the balance at Unitil Service was transferred to the operating companies.

8 **Q. Are any costs associated with the project currently being recovered in rates?**

9 A. No, recovery of the CIS investment is not currently included in rates.

10 **Q. How much of the CIS project was allocated to Northern?**

11 A. The total cost of the CIS project was \$36,832,636. Applying the three-factor  
12 allocator, the total cost of the CIS project that was allocated to Northern and has  
13 yet to be included for recovery in Northern’s rates is \$6,998,201 ( $\$36,832,636 \times$   
14 19%).

15 **Q. How much of this cost is included in the Company’s filed revenue  
16 requirement?**

17 A. The unamortized balance at the end of the test year and included in rate base is  
18 \$5,718,559.

19 **Q. Why does the total project cost not match the amount included in the test  
20 year?**

1 A. The difference of \$1,279,641 represents the amount that has already been  
2 amortized at Northern through the end of the test year prior to inclusion of the  
3 costs for recovery in rates.

4 **Q. The CIS has been operating since July 2017. Please describe the Company's**  
5 **experience since that time.**

6 A. Following the CIS implementation and related information system upgrades in  
7 July 2017:

- 8 • All bills have been processed accurately with a 100% accuracy rate and  
9 99.8% of all bills passing the first automated checkpoint. The remaining  
10 bills are transitioned to a manual check through a daily quality assurance  
11 review.
- 12 • Nearly 90,000 customers have been enrolled in the new and improved  
13 "MyUnitil" customer portal, which is a 300% increase over the legacy  
14 site.

15 As Unitil Service executed its first 100 Days Transition Plan, a "bill review" team  
16 was assembled and every customer's July 2017 invoice produced by the new CIS  
17 was compared to the customer's invoice produced in the legacy CIS in June 2017  
18 and July 2016 to ensure bill accuracy. Similarly, every customer's August and  
19 September 2017 invoice was compared to the legacy system invoice for the same  
20 months in 2016. A report was developed to compare, at the customer meter level,  
21 prior year and prior month history that occurred in the legacy CIS against current  
22 invoices produced in the new CIS. Once an invoice was deemed accurate, it was  
23 released for mailing to the customer. Over 550,000 customer invoices were

1 issued from the new CIS in the three months following the “go-live” date, at  
2 which time Unitil Service ended this daily manual bill review effort.

3 A scaled down bill validation protocol remains in use today that allows the  
4 Company’s billing personnel to identify and review any bills that appear to be  
5 outliers from prior historical bills.

6 Finally, perhaps the best indicator of the success of the new CIS is that the “go-  
7 live” occurred without notice by customers or the New Hampshire Public Utilities  
8 Commission. In fact, Unitil had not received a single complaint from a  
9 regulatory agency in any of the jurisdictions it serves about any issue related to  
10 the new CIS.

11 **Q. Have the CIS project costs been included in rates for Northern’s affiliate**  
12 **companies?**

13 A. The portion of the CIS project costs allocated to Northern’s Massachusetts  
14 affiliate’s gas and electric divisions were included in rates as a part of the  
15 settlement of those divisions’ last base rate cases (DPU 19-130 and DPU 19-  
16 131). The CIS project costs allocated to Northern’s Maine natural gas affiliate,  
17 Northern Utilities, Inc. d/b/a Unitil (“Northern Utilities Maine”), are currently  
18 subject to an audit proceeding before the Maine Public Utilities Commission  
19 (Docket No. 2021-00022). Northern Utilities Maine is participating actively in  
20 that proceeding to demonstrate that the full amount of the CIS project costs are  
21 reasonable and justifiable, and is pursuing full recovery in rates of these costs. For  
22 Unitil Energy Systems, Inc., a portion of the CIS project is currently included in



1 rates as part of a step increase in DE 18-036 and the remaining portion has been  
2 included for recovery as part of the current base rate case in DE 21-030.

3 **III. PROPOSED CHANGES TO TERMS AND CONDITIONS FOR**  
4 **DISTRIBUTION SERVICE**

5 **Q. Is the Company proposing changes to its General Terms and Conditions and**  
6 **Delivery Service Terms and Conditions?**

7 A. Yes, the proposed changes are reflected in the Company's redline tariffs included  
8 with this filing. The changes reflect a few small changes reflecting Company  
9 practice.

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

11 A. Yes it does.

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