In this order the Commission approves, with modifications, the terms of a Settlement concerning Unitil’s 2020 LCIRP, requires additional annual reporting and clarifies requirements for future LCIRP’s

I. PROCEDURAL HISTORY


By letter dated February 19, 2020, the Office of Consumer Advocate (OCA) notified the Commission that it would be participating in this proceeding on behalf of residential ratepayers consistent with RSA 363:28. There were no other intervenors in the docket.

On September 23, 2020, the Commission Staff, now Staff of the Department of Energy (DOE), filed the Prefiled Testimony and Exhibits of Kurt Demmer, Utility Analyst. On November 17, 2020, Unitil filed the Joint Rebuttal Testimony of company witnesses Kevin Sprague, John Bonazoli and Jacob Dusling.
On January 16, 2021, Unitil and DOE, filed a settlement agreement (Settlement) purporting to resolve all pending issues regarding the LCIRP. A hearing was held on the Settlement on January 22, 2021.

II. BACKGROUND

Unitil’s initial LCIRP filing stated that the Unitil franchise territory is comprised of two electric distribution systems: (1) the Unitil Capital System, and (2) the Unitil Seacoast System. Unitil Service Corp., a service company for Unitil, performs various ongoing planning activities for Unitil’s franchise area. The planning activities are intended to assess the short-term and long-term requirements and capabilities of Unitil’s electric distribution system. Those activities include distribution system planning to evaluate primary distribution circuits and substations, electric system planning to evaluate UES’s sub-transmission facilities and system supply points, joint system planning to evaluate the external delivery system which provides Unitil access to regional transmission and generation resources, and participation in statewide and regional transmission planning efforts.

Unitil’s LCIRP filing contained an overview of Unitil’s planning procedures along with related appendices, including Unitil’s distribution planning and design guidelines, separate evaluations of Unitil’s Capital distribution system planning and Unitil’s Seacoast distribution system planning, joint system planning between Unitil and Eversource; detailed project evaluations for several large planned investments, discussion of distributed energy resource investments, review of smart grid investments, load history and ten-year design forecasts for both the Capital and Seacoast regions, separate reliability studies for the Capital and Seacoast regions, and a section on Unitil’s demand side management activities.
III. SETTLEMENT AGREEMENT

The following is a summary of the pertinent provisions of the Settlement presented by Unitil and DOE in this case.

A. 2020 LCIRP Adequacy

The Settlement provides that Unitil’s LCIRP filing is consistent with the provisions of RSA 378:38 and requests that the Commission accept the filing.

B. Planning Criteria Incorporates Engineering Review

Unitil agrees to revise its planning criteria to allow for a case-by-case engineering review of equipment that is projected to exceed its normal loading limit but not exceed its long-term emergency loading (LTE) limit within the next five years. The engineering review may consider factors such as load cycles, clearances, and conductor characteristics, when evaluating the need for a capacity upgrade.

C. Power Monitoring Equipment to Verify Peak Loading

Unitil agrees to purchase power monitoring equipment (with real and reactive power measurements) that can be temporarily applied to distribution circuits and substations. Unitil agrees to revise its planning criteria to require use of power monitoring equipment to verify peak loading when engineering estimation or circuit modeling has indicated that a capacity-related upgrade greater than $250,000 in cost may be necessary within the next five years.

D. Electric Vehicle Charging Station Customer Contribution Assumptions

Unitil agrees to work with DOE to refine its estimation of the expected utilization rates for the EV charging stations proposed for the Market Basket development project planned for the vicinity of I-93 Exit 17. Unitil agrees to provide materials which support the draft contribution-in-aid of construction (CIAC) calculation to the DOE for review prior to providing the customer with a final CIAC figure. Unitil agrees to meet with the DOE to discuss the proposed utilization rate within ten days of the draft CIAC sheet
development and prior to providing the customer with the final CIAC figure. Based on that discussion, Unitil shall propose a standardized approach for determining high voltage direct current (HVDC) and clustered level two electric vehicle charging station utilization rates in its next rate case.

E. Non-Wire Solutions and Bow Bog Capacity Upgrade

Unitil agrees to work with DOE to further integrate the consideration of non-wire solutions (NWS) into its planning analysis for capacity additions greater than $250,000. Unitil agrees that its next area planning study shall consider whether NWS may serve as a viable alternative to the capacity-related transformer upgrade planned for Bow Bog. The NWS considered shall include, but not be limited to, energy efficiency, active demand reduction, combined heat and power, and battery storage. The parties agree that costs related to NWS may be requested for recovery through distribution rates consistent with RSA 374-F, VII(e). Prior to any future NWS solicitation, Unitil agrees to provide a draft of the solicitation to the DOE, and to incorporate input provided in the final solicitation.

F. Annual Planning Study Filings

Unitil agrees to file in its most recent LCIRP proceeding, by the end of the first quarter of each year, its annual planning study. With the annual filing, the Company agrees to provide a comparison of its ten-year historic load with the prior year’s 90-10 projection.

IV. POSITIONS OF THE PARTIES ON SETTLEMENT

A. Unitil

Unitil supported the Settlement and argued that its report was actually a plan for its projected capital improvement with a separate planning study for the period 2020-2024 for each of the Capital and the Seacoast regions of its distribution service system. Unitil noted that it described its planning guidelines in the plan at pp. 384-396, and its project guidelines at pp. 397-406.
Further, Unitil argued that it had worked with DOE\(^1\) to consider alternatives to the planned projects. The DOE engineer explored non-wires alternatives and other configurations to determine whether the projects chosen were least cost. Unitil stated that its plan identifies a high-level plan for distribution investments that are found to be least cost. Unitil concluded that the Settlement and the plan met all the criteria of RSA 378:39.

**B. OCA**

At the final hearing on January 22, 2021, the OCA opposed the Settlement and claimed that Unitil’s plan was not consistent with the directives of RSA 378:39. Specifically, OCA claimed that Unitil filed a report on its planning process rather than providing a list of proposed capital projects and showing which alternative projects it considered, which projects it had picked to complete, and the reasons for picking those projects. Instead, according to OCA, Unitil simply reported generally on its planning process.

**C. DOE**

DOE supported the Settlement and recommended that the Commission approve Unitil’s LCIRP together with the terms of the Settlement. At hearing, DOE testified that the Company’s plan, as modified by the Settlement, addresses DOE’s initial concerns outlined in its testimony and complies with the requirements of RSA 378:38 and :39. With regard to questions about whether a waiver of certain provisions of RSA 378:38 is required, DOE pointed to its witness’s testimony at Bates pp. 7-13. According to DOE, that testimony explains how Unitil’s plan meets each of the seven filing requirements for RSA 378:38, I-VII. DOE stated that the amount of analysis given to transmission needs

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\(^1\) At hearing on January 22, 2021, these individuals were referred to as Commission Staff, however, effective July 1, 2021, the reference changed to Department of Energy Staff. Hence we will refer to them throughout this order as DOE.
and energy supply options in Unitil’s plan was appropriate given New Hampshire’s restructured electric industry.

IV. COMMISSION ANALYSIS

Unless precluded by law, disposition may be made of any contested case at any time prior to the entry of a final decision or order. RSA 541-A:31, V(a). Pursuant to N.H. Admin. R., Puc 203.20(b), the Commission shall approve the disposition of any contested case by stipulation if it determines that the result is just and reasonable and serves the public interest. The Commission encourages parties to settle disagreements through negotiation and compromise because it is an opportunity for creative problem solving, allows parties to reach a result in line with their expectations, and is often a better alternative to litigation. *Hampstead Area Water Company, Inc.*, Order No. 26,131 at 3 (May 3, 2018). Nonetheless, the Commission cannot approve a settlement, even when all parties agree, without independently determining that the result comports with applicable standards. *Id.*

In our evaluation of electric utilities’ LCIRPs, we are guided by RSA 378:37:

The general court declares that it shall be the energy policy of this state to meet the energy needs of the citizens and businesses of the state at the lowest reasonable cost while providing for the reliability and diversity of energy sources; to maximize the use of cost effective energy efficiency and other demand side resources; and to protect the safety and health of the citizens, the physical environment of the state, and the future supplies of resources, with consideration of the financial stability of the state’s utilities. RSA 378:37 (Emphasis added).

Consistent with this statutory directive, the Commission is focused on minimizing costs through the LCIRP planning process.

A. Commission Concerns with Escalating Costs

The Commission is concerned by the large growth in utilities’ rate bases, despite little change in the number of customers served. We have noted trends of increasing investment in distribution system facilities and intend to examine utility capital expenditures more closely as part of the LCIRP process.
The table below shows Unitil’s rate base and operating revenue trends from 2010 to 2020, as well as customer count growth during roughly the same period.

<table>
<thead>
<tr>
<th></th>
<th>2010*</th>
<th>2020*</th>
<th>Cumulative Change *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate Base**</td>
<td>$127,408,473</td>
<td>$223,632,999</td>
<td>75.5%</td>
</tr>
<tr>
<td>Operating Revenue**</td>
<td>$40,802,769</td>
<td>$55,933,518</td>
<td>56.7%</td>
</tr>
<tr>
<td>Customers***</td>
<td>76,124</td>
<td>79,737</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

* Increase from 2010 to 2021 Settlement using 2009 and 2020 test year data, respectively.
** Source: Settlement Agreements used pertain to DE 21-030; DE 16-384; DE 10-055

In 2010 Unitil reported serving 76,124 customers. In 2020 Unitil reported serving 79,737 customers, which represents a 4.7 percent growth in the number of customers from 2010 to 2020. Roughly, over the same period, the company’s rate base grew by 75.5 percent, and operating revenues increased by 56.7 percent.

**B. Unitil 2020 LCIRP Adequacy**

RSA 378:38, I - VII provides the seven elements that a utility must include in its least cost integrated resource plan. Unitil’s LCIRP addresses these elements in the following manner.

1. A forecast of future demand for the utility’s service area (RSA 378:38, I)

In its LCIRP Unitil provides a 10-year load forecast based on the demand trajectory of the previous five years. Unitil considers load on a circuit-by-circuit basis.

LCIRP at 5-12. LCIRP at 21-22.

2. An assessment of demand-side energy management programs, including conservation, efficiency, and load management programs (RSA 378:38, II)

In its LCIRP Unitil discusses the load reduction accomplished through its energy efficiency programs which are part of the statewide energy efficiency resource standard program. LCIRP at 25.
In addition, Unitil has a few commercial and industrial customers enrolled in its targeted demand reduction program which is designed to reduce load during peak hours. The program began in 2019 with seven customers initially enrolled. In addition, Unitil indicated that it planned to start a residential demand reduction program in 2020 using thermostat controls to reduce air conditioning load during peak demand periods. LCIRP at 28-29. Further, the additional attention to non-wires alternatives to distribution system upgrades provided in the Settlement should increase load management options in the Unitil service territories. We encourage Unitil to continue and even increase customer participation in both of these demand reduction programs so long as the tariffed rates do not shift costs to other ratepayers.

3. An assessment of supply options including owned capacity, market procurements, renewable energy, and distributed energy resources (RSA 378:38, III).

Unitil states that it does not own any distributed energy resources (DER) and does not plan to own any in New Hampshire at this time. LCIRP at 16. The Company forecasts small (less than 250 kVA) customer owned DER based on the overall load growth of DER for the previous five years. The output of these units is accounted for in load regression models. LCIRP at 17. Large customer owned DERs (larger than 500 kVA) are not included in the load forecast. Instead, they are treated in the same manner as customer load additions and are included in the system planning process using engineering judgement. Id.

Unitil indicates that it is in the process of developing hosting capacity maps and heat maps for its Massachusetts Fitchburg service territory. Those maps will assist future DER developers in locating DERs on the Unitil Massachusetts distribution system. Unitil plans to create similar maps for its New Hampshire distribution systems in the future. LCIRP at 16. We expect Unitil to provide the same capacity and heat maps afforded to Massachusetts by the time of its next LCIRP docket.
4. An assessment of distribution and transmission requirements, including an assessment of the benefits and costs of "smart grid" technologies, and the institution or extension of electric utility programs designed to ensure a more reliable and resilient grid to prevent or minimize power outages, including but not limited to, infrastructure automation and technologies (RSA 378:38, IV)

Unitil has installed advanced metering infrastructure (AMI) and outage management systems (OMS). LCIRP at 20-21. Further, Unitil has integrated several information technologies including supervisory control and data acquisition (SCADA) and geographic information systems (GIS). According to Unitil, these systems form the basis for developing the distribution system to be an enabling platform supporting diverse activities by third parties and electricity customers. LCIRP at 21.

Unitil has implemented reliability planning and reporting on a daily, monthly and annual basis, in an effort to understand and avert service interruptions and customer outages. LCIRP at 18. Unitil points to a steady decline in SAID and SAIFI over the past 10 years as a measure of the success of its reliability planning process. LCIRP at 20.

We are encouraged by Unitil’s efforts to promote a more modern distribution system through its implementation of AMI and its use of OMS, SCADA and GIS. We also note that this metering infrastructure will support implementation of time of use rates as those rates are introduced for various customer classes.

5. An assessment of plan integration and impact on state compliance with the Clean Air Act of 1990, as amended, and other environmental laws that may impact a utility’s assets or customers (RSA 378:38, V)

Unitil does not own generating facilities and obtains electric supply for its default service customers through solicitations for supply from competitive suppliers operating in the New England regional electric markets. As a result, the environmental impact of Uniltl’s default service supply is the result of the regional generation fuel mix. Uniltl’s distribution planning does consider environmental impacts when evaluating distribution projects and attempts to minimize those impacts LCIRP at 14.
6. An assessment of the plan’s long- and short-term environmental, economic, and energy price and supply impact on the state (RSA 378:38, VI)

Unitil’s distribution project planning process employs a cost-benefit analysis template which uses a weighted scoring methodology that is used to calculate an overall ranking of alternatives. The cost-benefit analysis considers functionality, environmental impacts, reliability, feasibility, cost and value-added benefits of DER, of planned investments and of alternatives. LCIRP at 14. The LCIRP also includes an analysis of the economics of planned investments and potential alternatives. Id.

7. An assessment of plan integration and consistency with the state energy strategy under RSA 12-P (RSA 378:38, VII)

The State Energy Strategy in effect when Unitil filed this LCIRP was adopted in 2018 and has recently been superseded by a new State Energy Strategy adopted in July 2022. We note that Unitil’s emphasis on a cost-benefit analysis of its distribution projects, as well as its attempts to upgrade and automate its distribution system to facilitate third-party energy service providers and DER interconnection, are consistent with some aspects of both the prior and the current State Energy Strategy.

C. Settlement Provisions

We approve the additional commitments made by Unitil in the Settlement Agreement, including annual filing of its planning study, use of engineering criteria on a case by case basis to evaluate system components, acquisition of mobile power monitoring equipment, work with DOE staff on non-wires alternatives to some forecasted distribution upgrades, and working with DOE staff on the appropriate calculation of the customer contribution for electric vehicle charging at the Exit 17 project on I-93. We expect DOE to ensure that the EV charging rates for the EV charging at the Exit 17 project will not cause cost shifts to other customers. We clarify that the planning study should show the ten years of load history on an annual and an aggregated basis. Each of
these Settlement commitments will improve Unitil’s continued development of its distribution system.

D. Guidance on Future LCIRPs

While the LCIRP in this Order includes important topics and was presented in good faith, we find the process going forward could be improved to better meet the core purpose of an LCIRP, which is “to meet the energy needs of the citizens and businesses of the state at the lowest reasonable cost...” RSA 378:37. The Commission views an LCIRP as the opportunity for the utilities it regulates to work with interested parties to evaluate capital plans that secure reliable and least-cost service for ratepayers. Going forward, the Commission will hold Unitil to the capital plans developed through the LCIRPs and will expect sufficient notice and justification for any material deviations from those plans.

The recent trend of the rapid growth of utility rate base is of significant concern. Going forward, as part of each Unitil rate case, we will consider how its capital investments align with its approved LCIRP and thus support the goal of securing the least-cost resources and minimizing the rate impacts for customers. We find that this approach is consistent with the General Court’s intent, as RSA 378:40 requires that a Commission-approved LCIRP be on file before a change in rates may occur.

We expect future LCIRP capital plans to resemble those reviewed by executive management at the Company, which include clear justifications for each major capital addition (costing in excess of $250,000) and retirement as well as for aggregated smaller investments by category. The Commission is particularly interested in areas where the capital investments are not driven by customers added or incremental kWh served. The next LCIRP shall include a list of proposed projects and the associated capital investments for the 10-year planning horizon, a 10-year capital forecast, and a discussion of the reasons for the investments, updated annually.
RSA 378:39 requires the Commission to, “consider potential environmental, economic, and health-related impacts of each proposed option.” We read this language to require our review of specific investment options in a capital investment plan as opposed to a more limited review of planning criteria. We agree with OCA’s argument at hearing that the statute requires a project-by-project evaluation and not just a discussion of the planning process. The Commission’s priority when considering alternative capital investments begins with a financial comparison.

“...Where the commission determines the options have equivalent financial costs, equivalent reliability, and equivalent environmental, economic, and health-related impacts, the following order of energy policy priorities shall guide the commission’s evaluation: I. Energy efficiency and other demand-side management resources; II. Renewable energy sources; III. All other energy sources.” RSA 378:39 (emphasis added)

Regarding distribution system upgrades, alternative projects with equivalent costs should be ranked based on the project’s impact on environmental, economic and health-related factors.

In estimating a project’s reduced emissions or environmental impacts Unitil should rely on peer reviewed scientific articles and other public or governmental information for emissions impacts of the New England regional electric generation fuel mix or other environmental impacts identified. To consider economic impacts, Unitil should estimate the direct jobs attributable to its distribution system in New Hampshire over the past 20 years, and the economic impact of those jobs. Unitil should not unnecessarily devote its resources to developing complex economic models or economic studies. Instead, Unitil should rely on US Department of Labor or other governmental data and publications in providing the aforementioned estimates, whenever possible. We expect Unitil to predominantly use its own internal resources to produce an LCIRP. The LCIRP should be an extension of the utility’s own internal planning processes.
It is the Commission’s objective to transform the LCIRPs into a useful component of the capital planning process for Unitil. We recognize that each company has its own capital planning process, and we do not seek to upend how companies make capital decisions but rather integrate the statutorily required LCIRP into each company’s internal process. We will require that Unitil conduct its capital planning in a manner consistent with the LCIRP Statute.

While uniformity in the formatting of summary documents across LCIRPs would facilitate Commission review, Unitil is expected to provide all necessary supporting documents in the format that is used for its internal process. Thus, what Unitil submits to the Commission should represent the same documentation and format that Unitil’s Board of Directors, and/or relevant subcommittees review. When necessary, the Commission will consider requests for confidentiality pursuant to the terms of RSA Chapter 91-A and Commission rules.

The LCIRPs are the chance for the Commission to exercise its regulatory role to ensure that each utility it regulates is making investments in capital assets to enable customers to benefit from the least cost resources available. For this evaluation, we are interested in two views, a functional view, and a project view.

- For the functional view, the Company should show planned investments in maintenance, system improvements (meters, customer information systems, etc.), system expansion, and any other major category the company believes would be useful to the Commission.

- For the project view, the Company should include descriptions of any planned projects costing $250,000 or more and aggregated project listings by asset type for smaller investments.

Unitil’s summaries should include a capital planning time horizon looking out 10 years and history for the previous five years, with investments expressed for each year in dollars. Unitil’s load forecasts should continue to be 10-year forecasts and include the most recent five years of history.
In addition, we expect Unitil to be guided by Order No. 26,358 (March 22, 2020) as clarified by Order No. 26,575 (February 23, 2022), regarding the grid modernization process to be followed in future LCIRP proceedings. Protection from cybersecurity attacks should be included. With respect to grid modernization, including cybersecurity, the focus should be on the capital required and alternatives considered.

**E. Additional Annual Reporting Requirements**

In the Settlement Agreement Unitil has agreed to file in its most recent LCIRP proceeding, by the end of the first quarter of each year, its annual planning study. With the annual planning study, to the extent not already included, we require that Unitil file its planned distribution system capital investments for the coming year and over the 10-year planning horizon, as well as a summary of the prior five-year’s capital investments. On an annual basis, the Commission will require Unitil to file capital investment summaries as described above, the status of major investments, and a discussion of the functional and project view as compared with Unitil’s prior approved LCIRP capital plan.

We also direct Unitil to file annually by the end of the first quarter of each year, an estimate of the smaller behind-the-meter customer-owned distributed generation capacity (less than 250 kVA) existing and added each year in its two New Hampshire service territories, as well as a description of the types of generation this capacity represents, solar, wind, battery storage, etc.

Regarding larger distributed generation projects (larger than 500 kVA) interconnected to the Unitil distribution system, we ask that Unitil include in its annual reporting a description of the projects added over the prior year together with an assessment of time required for the interconnection approval and implementation process for each project and the total generating capacity of all projects interconnected to the system at year-end.
Finally, we request an annual status update on the hosting capacity maps and heat maps for its Massachusetts service territory, LCIRP at 16-17, and its New Hampshire service territory. We expect Unitil to have hosting capacity and heat maps for its New Hampshire territory by the time it files its next LCIRP.

**F. Motion for Confidential Treatment**

The New Hampshire Supreme Court has interpreted the exemption for confidential, commercial, or financial information to require an “analysis of both whether the information sought is confidential, commercial, or financial information, and whether disclosure would constitute an invasion of privacy.” *Union Leader Corp. v. NH Housing Fin. Auth.*, 142 N.H. 540, 552 (1997) (quotations omitted). “Furthermore, the asserted private confidential, commercial, or financial interest must be balanced against the public’s interest in disclosure, since these categorical exemptions mean not that the information is per se exempt, but rather that it is sufficiently private that it must be balanced against the public’s interest in disclosure.” Id. at 553 (citation omitted).

In furtherance of the Right-to-Know law, the burden of proving that the information is confidential and private rests with the party seeking non-disclosure. *See Goode v. NH Legislative Budget Assistant*, 148 N.H. 551, 555 (2002). RSA 91-A:5, IV expressly exempts from public disclosure requirements any “records pertaining to ... confidential, commercial or financial information ....” In determining whether commercial or financial information should be deemed confidential and private, we consider the three-step analysis applied by the Commission’s rule on requests for confidential treatment, N.H. Code Admin. Rules Puc 203.08. The rule is designed to facilitate the balancing test required by the relevant case law by requiring petitioners to: (1) provide the material for which confidential treatment is sought or a detailed description of the types of information for which confidentiality is sought; (2) reference specific statutory or common law authority favoring confidentiality; and (3) provide a
detailed statement of the harm that would result from disclosure to be weighed against
the benefits of disclosure to the public. See Puc 203.08(b).

In its motion submitted with the LCIRP, Unitil seeks to protect information
contained in its schedules attached to the LCIRP and related to power flows on its
distribution system. Unitil asserts that the schedules contain sensitive and confidential
commercial and financial information including detailed design and configuration of its
distribution infrastructure that, if disclosed, might allow damage or disruption to the
system’s delivery of electricity.

We find that this distribution infrastructure information is confidential. We also
find that the function of the Unitil distribution system is of interest to the public. When
balanced against the potential destruction or vandalism of these critical system
components that disclosure could cause, however, we find the balance is in favor of
protecting the detailed power flow information from public disclosure. Therefore, we grant
the motion to keep that information confidential.

Based upon the foregoing, it is hereby

ORDERED, that Unitil’s LCIRP is APPROVED; and it is

FURTHER ORDERED, that the Settlement as modified by this order is
APPROVED; and it is

FURTHER ORDERED, that Unitil shall file its first set of annual reports with the
Commission in this docket, including the information described in this order, on or
before March 31, 2023, and at the end of the first quarter of each year thereafter; and it is

FURTHER ORDERED, that Unitil shall file its next LCIRP with the Commission,
including the information and analysis described in this order, within two years of a final
order in this docket, as required by RSA 378:38; and it is
FURTHER ORDERED, that Unitil’s motion for confidential treatment is GRANTED.

By order of the Public Utilities Commission of New Hampshire this fifteenth day of August, 2022.

Daniel C. Goldner
Chairman

Pradip Chattopadhyay
Commissioner

F. Anne Ross
Special Commissioner
Service List - Docket Related

Docket# : 20-002

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