Connecticut Light and Power d/b/a Eversource Energy
Docket No. 17-10-46
Annual Plan Compliance with January 11, 2018 Settlement Agreement Section 3.a.ii.(2)
June 4, 2021
Exhibit B

Summary

The 2020 capital expenditures of The Connecticut Light and Power Company dba Eversource Energy ("the Company" or "CL&P") were $491.2 million, which is 1.6%, or $7.9 million, more than the Company's forecasted plan for the 2020 Construction Program, filed with the Authority on February 6, 2020 in this Docket. As shown in the following explanations, the Company experienced budget changes from the Company's original estimated construction program for certain individual categories and has provided explanations where spending varied by more than 10% from the Company's original estimates.

Variance Explanations:

(a) New Customer - This budget change is primarily due to a large customer project - ASML Facility Expansion, a PURA mandated project - Wind Colebrook South expansion, and a higher level of customer driven annual work. One of Norwalk district's largest customers, ASML, expanded their facility and increased their demand from 4.4MVA to 8MVA. ASML had been supplied by a 6MVA step-up transformer and primary metering. The new design eliminated the unique step-up transformer and supplied ASML with 2-27.6kV feeders and Vista switchgear. This project touched several budget categories, but since it was driven by the ASML project it was funded under New Service. Under this project we rebuilt a portion of the ROW, eliminated unique 6MVA step-up transformer, automated supply to largest customer in Norwalk district, addressed contingency overloads on other feeders and installed new UG cable.

Wind Colebrook South had two existing wind turbine facilities rated at 4.98 MWs on the 23 kV Riverton Road 14N3 feeder. Per PURA mandate, Eversource built out the existing 27.6 kV Canton 5R80 feeder to directly feed the Wind Colebrook site. The total aggregate of the site is 9 MVA, with the addition of a third turbine. The project extended approximately 6 miles of 556 TW construction.

(b) Peak Load/Capacity - A project to address a contingency overload for Lakeview substation was deferred to allow for additional time to work with the town and its residents on permissioning the new circuit route. The project will be constructed in 2021.

(c) Capital Tool Purchases/Other – This budget change is primarily due to the CT Voice Radio project and the DMR Upgrade Tait Systems project. The change is due to a 2019 re-scoping of the CT Voice Radio project to utilize a 220-megahertz (MHz) Digital Mobile Radio (DMR) solution in place of the originally proposed 450 MHz DMR solution. Ultimately this change in scope was due to the enhanced performance and savings which would be achieved by utilizing the 220MHz spectrum. The 2020 budget variance is due to the continued effort of replacing the legacy Voice Radio System in Connecticut. The primary driver of the budgeted 2020 capital expenditures for this initiative are the continuation of the purchase of radio communications hardware, associated site construction and renovations, system integration, testing, commissioning and rollout of the new voice radio solution to CT end users of the system. Because this project will benefit the Company's Connecticut transmission and distribution business segments and its affiliate, Yankee Gas, "Attachment A" reflects the appropriate portion of the total project cost that is allocated to the Company's Connecticut distribution business.

There was also a budget change associated with the proposed upgrade to the Western MA legacy Tait radio system. When implementing the previously proposed 450MHz DMR solution, it was anticipated that Western MA would be upgraded with CT. This is no longer the case with the 220MHz spectrum. This project has not been initiated due to the Company's focus on completing the CT DMR implementation. It is anticipated that this project will initiate in 2021 and will not have costs associated with the Company's Connecticut electric distribution or transmission segments.

(d) Emergent Equipment Failures - This item relates primarily to the capitalization of storm costs, which are not estimable and therefore drive variations from budget. The August 2020 Tropical Storm Isaias was the main driver of storm capitalization.

(e) Environmental - This is primarily due to the timing of Substation Oil Circuit Breaker (OCB) replacements. Fewer replacements than budgeted were realized during 2020 due to outage availability.

(f) Information Technology – The Eversource Information Technology (IT) End User Computer (EUC) department maintains various desktop PCs, laptop PCs, rugged PC equipment, which provide various terms of operational service. As these devices near or exceed their end-of-life, functional efficiency or supportability, it is prudent to replace these devices. An objective is to fund the replacement of the older end-of-life PCs with new PCs, to maintain a computing environment that supports a 5-year lifecycle period.

Extended premier support for the Microsoft Windows 7 OS ended in December 31, 2020, making the Microsoft Windows 7 OS obsolete in 2021 at Eversource. 2020 included the replacement of PCs, running the Microsoft Windows 7 OS, that were near end-of-life with new Windows 10 PCs, to avoid multiple customer upgrades of reimages in 2020 and upgrade replacements in 2021.

(g) Lighting – The budget change is primarily due to a higher level of non-roadway lighting annuals and the LED green lights program. In addition, conduit & new conductors have been installed at many Direct Buried (DB) Faults locations. This will eliminate the need to continue to remediate temporary repairs that require additional work in the future. Stray voltage inspection repairs were also contributing factors.

(h) Line Relocations/Act of Public Authority – 2020 was an active year for Town and State relocation projects. We had higher than forecasted spend for the annuals in addition to the two large projects, the Norwalk Westport Avenue Road Widening project and the Hartford Road Bridge Rebuild Manchester project. There was a CDOT project 102-285 to improve the intersection on Westport Ave and Strawberry Hill Ave in Norwalk. The purpose of the project was to widen the road which required us to relocate our OH and UG facilities. The duct bank from MH76-79 (1305') went from being under the sidewalk to under the roadway. The change in depth from under the sidewalk to under the road caused the duct bank to be at a depth of less than 24" and required it to be replaced.

The bridge on Hartford Road in Manchester spans the width of the Hop Brook. The bridge was built in 1931 and spans 41 feet. The bridge is slated to be rebuilt by the Town of Manchester. Eversource had a

duct bank in the bridge with three, 23 kV, feeder getaways (Circuits 3A03, 3A04 and 3A05) supplied out of the Manchester 3A Substation. There was also one overhead feeder getaway (Circuit 3A02) that spanned the bridge. With the new bridge design, the existing duct bank conflicted with the new bridge support structures. This project relocated the duct bank to the opposite side of the bridge. The old duct bank was made up of fiber duct. The new duct bank is a mixture of 5" PVC and fiberglass conduits. UG Circuits 3A03, 3A04 and 3A05 were relocated to the new duct bank and reconductored with 750 MCM Cu EPR cable (existing cable is 500 MCM Cu EPR) from MH-106 to MH-107.

(i) Meters – The Company's 2020 meter capital purchases were reduced due to the impacts of COVID-19. The Company reduced the number of meter exchanges (and the associated number of meter purchases required) to minimize potential customer electric service interruptions with customers working and schooling remotely from home. In addition, the Company's Covid-19 work protocols restricted meter work activities to only essential transactions (a ~50% reduction in overall meter work) during the height of the pandemic to limit customer and employee exposure to the virus, which also contributed to the reduced number of meter purchases required in 2020.

(j) Pre-cap Transformers - This variance is due to experiencing a greater number of transformer failures requiring replacement due to extreme weather experienced in 2020.

(k) Distribution Line Reliability - A decision was made in June of 2020 to defer 3 Reliability projects. The 3 projects deferred were the Greenwich 22E36 Reconductoring Cliffdale Road project, the Heritage Village Southbury Reliability project, and the 1291 Albany Avenue Hartford Replace Switchgear project. A project to reconductor a portion of the Greenwich 22E36 circuit was deferred. A majority of the line had been reconductored in 2019, the remaining portion is a tap to 7 customers. A decision was made to perform additional trimming and hazard tree removal to improve the reliability. We will monitor performance and take the appropriate action as needed.

A project to install new switchgear was deferred to allow additional time to acquire the material. The work is planned for 2021 construction.

(l) Network Reliability - In 2020, the Company continued the installation and enhancement of its communication system for secondary underground networks in its distribution systems across CT. This system provides essential data to system operators and engineers to operate, maintain and plan during normal and contingency network events.

In 2020, there were fewer UG Network Automation projects initiated than originally estimated since scheduled outages were postponed due to operational and weather-related conditions, and there was a lower level of emergent work related to UG Structural Issues due to fewer than anticipated installations as identified during field inspections. This work is being deferred to 2021.

(m) Reliability – Other - The budget change is due to the timing of the GIS Geospatial Accuracy project. Certain project costs were shifted from 2020 to 2021.

(n) URD and DB Cable Reliability - This budget change results from the Company's analysis that evaluated the replacement versus the continued repair of aging, obsolete direct buried ("DB") electric distribution cable in underground residential ("URD") and commercial developments. That analysis demonstrated that replacement of this equipment over the long term was a superior, permanent solution that would greatly improve reliability of service, and replacement of this equipment would eliminate the need to continue to remediate temporary repairs that require additional work in the future. Therefore, starting in 2019, the Company instituted a course of replacement with annual replacement targets. The replacement program will improve system reliability by minimizing the likelihood of recurring outages on the same cable and eliminating recurring maintenance requirements. The Company provided additional details about its URD-DB cable reliability program in its December 11, 2019 compliance filing in Docket No. 17-10-46 at Exhibit 1(b), Pages 2-3. As a result of Tropical Storm Isaias, we incurred an increased number of faulted primary cables that needed replacement in 2020. This largely contributed to a higher spend for the year.

(o) Customer Focused Trimming - Numerous storms in mid to late 2020 including Tropical Storm Isaias impacted the program's schedule.

(p) DSCADA Radio Expansion – The budget variance is due to greater assignment of costs to Transmission as compared to the original estimate. .

(q) Pole Integrity Program - The variance is due to a slightly lower number of rejected poles that were found as a result of the annual pole inspection and the deferment of certain work into 2021.

(r) Right of Way Lines - Project 3A02/3A09 ROW Structure Replacement was planned for construction in 2020; the scope of the work was to rebuild the H-Frame structures on the highway crossing over I-384. After meeting on-site and reviewing the construction aspects, a better UG design was developed. This design eliminates the highway crossing as well as a few poles in the ROW that were difficult to access. To accommodate the new UG option, an easement was needed from Manchester College. Due to the timing of the easement and the civil work required for the UG option, the project was deferred to 2021.

(s) SR Double Poles Removals - This budget change is the result of more double-pole removals across Connecticut. There were also more resources deployed to complete Third Party Attachment work throughout the state, which also led to an increase in double-pole removals.

(t) Substation Circuit Breaker Automation - This variance is due to work being deferred to 2020 due to engineering deliverables and resource availability.

(u) Substation Flood Mitigation – The variance is due to work being deferred to allow for engineering review of pipeline projects that may remove the need for long term flood mitigation.

(v) Substation Security – Certain work on the Manchester substation security project upgrade was deferred from 2019 to 2020 due to material and resource constraints.