## Electric Distribution Utilities Docket No. DE 20-170 Electric Vehicle Time of Use Rates Unitil Energy Systems, Inc. Set 1 Data Requests

Received: 10/26/2021 Date of Response: 11/09/2021

Request Number: Unitil 1-5 Witness: Dr. Sanem Sergici

## **Request:**

Refer to page 40 lines 13-15 of the direct testimony of Sanem Sergici.

- a. Is Dr. Sergici of the opinion that Time-of-Use (TOU) rates are an alternative to demand rates?
- b. In what circumstances would it be advisable to replace a demand rate that is recovering a distribution utilities distribution capacity investment with a TOU rate?
- c. What cost shifting occurs when a TOU rate is used in place of a demand rate when both are used to recover distribution capacity investments?

## **Response:**

- a. In the absence of demand charges, TOU rate is a viable alternative as it is consistent with the marginal cost principles, while minimizing cross subsidies.
- b. If the cost is demand driven and is not able to be recovered through demand charges in the rate design, then the TOU rate could be the next best alternative.
- c. Unlike demand charges, TOU rates are volumetric. To the extent that the customers move their usage from peak to off-peak periods in response to the price signals, some of the embedded costs may not be recovered. However, this rate would still be the best alternative to the demand charges, as it will provide price signals to help avoid the future need for more investment.