

Unitil Energy Systems, Inc.
Docket No. DE 20-170
Electric Vehicle Time of Use Rates
NHPUC Staff Set Information Requests

Received: July 21, 2021
Request No. CLF & CENH 1-23

Date of Response: August 4, 2021
Witness: John D. Taylor

Request:

In the Testimony of Carroll *et al* at page 25 of 53, it states that because “EV load is flexible, one goal of EV rate design should be to promote charging at times of low demand.” For public charging stations, the price elasticity of demand is low given that EV users who need to recharge EVs on public highways are often unable to defer charging to different periods and, thus, have limited ability to shift demand to other time periods. Given this low price elasticity of demand, please explain why Unitil has designed commercial EV TOU rates that would apply to public charging stations? Does Unitil anticipate that its proposed commercial EV TOU rates will have an effect in promoting charging station use at times of low demand? Further, given the low price elasticity of demand, has Unitil evaluated whether charging station operators/owners will be sufficiently incentivized to participate in proposed commercial EV TOU rates? Please produce all analyses and workpapers relating to any evaluations that Unitil has conducted regarding either the effect that its proposed rates would have on shifting charging station use to other time periods or the level at which Unitil expects that charging station owner/operators will adopt its commercial EV TOU rates.

Response:

The Company’s approach has been to provide a suite of rate offerings so that customers may select from multiple rate options that best suit their needs. Some customers may choose to remain on fixed, non-time varying rates while others choose to enroll on the proposed time of use (TOU) rates. The benefit of time differentiated rates for public EV charging stations may vary for public charging stations providing service to their customers depending on how facilities are being utilized. Some EV charging stations may realize use cases with significant benefits from a TOU rate structure (e.g., hotels, overnight fleet locations) whereas others may find fixed rate structures as advantageous. Ultimately, this depends on the charging station operator’s ability to control or incentivize usage during certain time periods, ideally off-peak. The Company did not perform any analysis or create any work papers relating to the anticipated effect of commercial EV TOU rates on charging station use, as customer behaviors will vary significantly. TOU rates generally are intended to manage peak loads in an effort to mitigate system and supply costs for customers. The Company believes that the commercial EV TOU rates developed align with the policy goal of mitigating peak demand while providing customers with multiple rate options to choose from to meet their specific needs.