

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF ENERGY**

IP 2022-001

Investigative Proceeding Relative to Customer-Generator Interconnection

Set 2 Comments of Unitil Energy Systems, Inc.

I. Introduction

Unitil Energy Systems, Inc. (“Unitil” or the “Company”) submits these comments in response to the Notice of Second Technical Session issued in the above-captioned investigation on May 26, 2023. Unitil offers these comments on a preliminary basis in advance of the July 18, 2023 technical session and reserves the right to expand upon or add to these comments at the technical session, and to respond to comments offered by other parties.

II. Comments of Unitil Energy Systems, Inc.

a. Brief description of criteria, assumptions and methodology used to determine information on NH hosting maps, frequency of updates

Unitil’s Hosting Capacity Map is available at <https://unitil.com/ways-to-save/solar-private-generation/nh-interconnection-hosting-capacity-map>. The map provides the estimated maximum amount of distributed energy resources (“DER”) that can be accommodated on a particular circuit without the need for significant system modifications. The estimated amount is based on: the thermal capacity of a circuit at a point close to the substation compared to the total net power flow (during minimum Load) due to all DER proposed and in service; and substation transformer rating compared to the reverse power flow, when the heaviest loaded circuit is out of service. The Hosting Capacity Map is updated monthly to reflect the aggregate amount of DER in process and in service. The circuit ratings and load flow shown on the map are updated annually.

b. Feedback on concept of posting longer term capital projects on Hosting Map layer or via link

Unitil does not support the inclusion of such information on the Company's Hosting Capacity Map. The Company's forward-looking capital plan is subject to change on an annual basis depending upon, among other things, system requirements. Including longer-term capital projects on the Hosting Capacity Map will have the effect of making the map less reliable for DER planning purposes, and thereby reduce the value of the map.

c. Application Fees

As Unitil explained in its response to Request 1-2 on January 27, 2023, the number of DER interconnections received by Unitil in the past two years has increased by a factor of four. This has resulted in increased costs including, among other things, increased labor to process applications and the creation and maintenance of the hosting capacity map. It is appropriate that the drivers of these increased costs, the applicants, bear responsibility for them. Unitil supports the implementation of application fees for all applications not processed through "simplified" screens, i.e., those that are more than 10kW, single phase, or 25kW three phase.

d. Consistency among utilities for Interconnection Agreements

Unitil supports the development of a standard template for interconnection agreements. At present, there is no standard process in New Hampshire for applicants other than residential applicants (i.e., up to 10 KW). Generally, under that process, a residential customer submits an application form that is standard for all EDCs. The EDC will review the application and inform the applicant as to whether it is complete or incomplete. The technical screens used to analyze the application are standard across EDCs, which determine whether an applicant can interconnect or if system upgrades are required. However, for larger customers, the EDCs do not

follow a standard process. Unitil, for example, uses the same process implemented by its Massachusetts affiliate, Fitchburg Gas and Electric Light Company (“FG&E”).

e. Cost allocation for distribution system upgrades – Preferences for other state models

The Massachusetts Department of Public Utilities has recently implemented a provisional framework under which the costs of capital projects to upgrade the electric system based on projected load would be shared by the interconnecting distributed generation facilities and all ratepayers of the EDCs. DPU 20-75, In re Distributed Energy Resource Planning, Order on Provisional System Planning Program (November 24, 2021).¹ At a high level, ratepayers initially pay the costs of the capital investment project through a charge on their electric bills, and each distributed generation facility that is subsequently able to interconnect due to the upgrade pays a pro rata share of the costs of the CIP. Costs collected from the interconnecting facilities will be returned to ratepayers through a credit on their electric bill through a reconciliation mechanism. Unitil’s Massachusetts affiliate, FG&E, has not participated in the provisional program at this time. The question of whether there should be a shared allocation cost for small customers remains unresolved at this time.

f. Curtailment of DER vs. investment by developer

Unitil understands this prompt to relate to the question of whether an EDC should allow curtailment of developer output to avoid or defer system upgrade costs. The Company has concerns about this approach as it is difficult to incorporate a curtailment schedule into system planning. It is also very difficult to monitor and enforce. Curtailment will become more plausible when the EDCs Distributed Energy Resource Management Systems (DERMS).

¹ <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/14232299>

III. Conclusion

Unitil appreciates the opportunity to provide these Set 2 Comments and looks forward to discussing these issues further at the July 18, 2023 technical session.