

ASO Study Biweekly Report to Impacted Customers

This is Eversource's seventh biweekly report to customers impacted by the five Affected System Operator (ASO) studies announced on October 24, 2019. The reports were emailed to customers and posted to the website on 11/21/2019, 12/5/2019, 12/19/2019, 1/2/2020, 1/16/2020 and 1/30/2020. Please note the update issued on 12/5/2019 related to the ASO kickoff meeting.

Please note since the last biweekly report, Level 0/1 studies have commenced and therefore will be receiving updates on a monthly basis starting on February 21st. This biweekly report has transitioned to just Level 3 customers as their study has not yet commenced.

Earlier in the week on February 11th, all ASO customers received an email with registration information for the upcoming ASO Customer Meeting on February 24th at Eversource's Westwood, MA office. Customers have the option of attending in person or via phone.

In the Dec. 12 Customer Kickoff Meeting, a list of technical documents that would be required by Eversource for a Level 3 Study was provided to customers. On January 16th, Level 3 customers received a checklist via email of technical data that they should begin gathering in preparation to provide to Eversource prior to the study commencing in late March 2020. The data customers provide for the study will formally lock in their project's scope.

To date there have only been a few technical documents/model submittals to Eversource from a handful of Level 3 customers. Please note that all documentation will be due by March 16, 2020 as discussed in the Customer Kickoff Meeting.

Eversource is working to send out emails next week to Level 3 customers with payment information and requesting customers opt in or out of the Level 3 studies.

ASO information and materials, including the Level 3 technical data requirements, can be found on the ASO Website:

<https://www.eversource.com/content/ema-c/about/about-us/doing-business-with-us/builders-contractors/interconnections/massachusetts/affected-system-operator-studies>

1. What additional information is needed to determine if an ASO study is necessary?

Eversource issued initial ASO Study notifications on Nov. 13 to all applicants that were identified as requiring a Level 0/1 or a Level 3 ASO study. Eversource had increased its communications with ISO-NE from monthly to daily to solidify project study level determinations and groupings. During the Level 0/1 study process, some projects may be identified as requiring further Level 3 studies and those projects (if any) will add to the final scope of the Level 3 study conducted.

To date, there has been no change to the need for these five ASO transmission study groups as defined.

2. When will the EDC know whether an ASO study is required?

As noted above, ASO studies will be required and five ASO transmission study groups have been developed. The Level 0/1 ASO studies have commenced on January 21st and will need to be completed before the Level 3 studies can begin. An overview summary of the next steps and overall process is described below with status updates for reference:

- Eversource held an ASO Study Customer Kickoff meeting on Dec. 12 at Eversource’s Westwood, Massachusetts office.
- Customers identified for the Level 0/1 studies will review the study cost provided by Eversource.
- Customers identified for the Level 0/1 studies will opt in or opt out within the timeframe communicated to them (January 6); if the customer opts in they will need to formalize this with the study payment.
- Customers identified for the Level 0/1 studies that opt in must pay for the studies by January 20, 2020.
- Eversource will request additional technical information and models from customers participating in Level 0/1 studies, if needed. For customers in a Level 3 study, Eversource has provided a Level 3 Technical checklist on January 16th to support customer data and information gathering. This technical checklist list has also been posted to the ASO website.
- Level 3 customers will provide technical information and payment as requested by March 16, 2020 to fully opt-in to the Level 3 study group.

For the Level 3 studies to commence, the milestones below need to be completed for all Level 0/1 customers in the three eastern MA ASO study areas and the two western MA ASO study areas. Exact dates for Level 3 studies to commence are not known at this time, Eversource is aiming to receive all customer requested technical data back by March 16, 2020 so the scopes of the projects will be locked and ready for the Level 3 ASO study to commence thereafter, ideally by the end of March.

Eversource aims to follow this milestone schedule for conducting the Level 0/1 studies, with Level 3 studies to follow:

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| Level 0/1 Kickoff Meeting With ISO-NE | 1/21/2020 | Completed |
| Preliminary Results Shared With ISO-NE For Review & Concurrence | 2/17/2020 | On Track |
| Update to the DPU and ASO Customers on preliminary findings and any potential Level 3 projects | 2/27/2020 | |

Level 3 studies cannot commence prior to the completion of Level 0/1 because:

- Level 0/1 system upgrades, if identified, are required to be modeled in the Level 3 study
- Based on the Level 0/1 results, Eversource may identify projects that require further Level 3 studies and those projects (if any) will add to the final scope of the Level 3 study conducted
- The completion of the Level 0/1 study must be completed prior to Level 3 studies commencing due to ISO-NE requirements to sequentially model the projects based on their PPA approval

3. What are the potential impacts on interconnection timelines and costs?

At this time for planning purposes, Eversource anticipates Level 0/1 studies to cost approximately \$60,000 (or about \$500/MW) and take around three months from study commencement. Level 3 studies will begin once Level 0/1 studies are complete so that the applicable transmission and distribution upgrades are known and can be modeled in a Level 3 study. The Level 3 study typically takes about nine months from commencement.

Exact costs for Level 3 studies are unknown at this time due to variables such as the results of the Level 0/1 studies, potential changes in ISO-NE study requirements, as well as customers who may choose to opt out of the study, thereby increasing the shared cost to the remaining applicants. However, for planning purposes costs may range from \$5,000 to \$15,000 per MW, with the Greater Boston and Springfield areas at the top of this range.

4. Are there any proposed resolutions that the EDC is exploring to enable some affected DG applicants to proceed with the interconnection process prior to completion of the ASO study?

Eversource is continuing to proceed with distribution-level studies while ASO transmission-level studies are getting ready to be conducted. This is being done to reduce the distribution-level study wait time and increase value to customers.

Projects that had interconnection service agreements (ISAs) prior to the ASO study announcement on Oct. 24, 2019 that required transmission studies will continue with their separate transmission studies outside of these five ASO group studies. Eversource is also continuing to perform distribution group studies where the same customer has multiple projects in sequence on a single circuit.

5. How does the EDC plan to address the situation and minimize delays to interconnection timelines of (potentially) affected DG applicants?

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