CESIR Study Study Options

Industry Position Paper, Presented to the IWG for the 30 May 2024 Meeting

# Problem Statement

The current CESIR study process is only set up to study projects for the capacity and parameters proposed in the application, ultimately providing a single interconnection option based on the mitigations required to accommodate the developers proposal. This is an inefficient process, as it does not allow for proactively identifying lower cost, and in some cases, feasible interconnection options and could result in lengthy and duplicative restudy processes. PsEG-LI provides options where applicable, but this is not consistent or standardized.

The Industry proposes to revisit the CESIR study methodology and incorporate the study of alternate options, as discussed below in more detail.

# Background and Discussion

As Hosting Capacity continues to decrease in the state of NY, it is increasingly likely a project encounters grid constraints during its system impact review that need adequate mitigation, some of which could be significantly minimized by reducing the DER’s nameplate. Due to a developer's lack of granular insight into the utility system, they are not in the best position to propose optimized system sizing to maximize hosting capacity while minimizing interconnection cost.

As mentioned above, CESIR results typically only consider one scenario, the one proposed by the Developer. This is not very efficient in evaluating better interconnection options, and potentially detrimental to increasing DER penetration due to projects potentially withdrawing prematurely. In the current process, a Developer has to wait for and evaluate the CESIR for their original application, and if this identifies significant upgrades or finds the interconnection infeasible, the Developer would have to propose alternate restudy options which add time and cost.

The ideal solution is the Utility consider in their CESIR review an alternative scenario which would mitigate the need for some major upgrades. The alternate solution could be based on the basic thermal and voltage screens, and might seem ‘Common Sense Based’ on a given project. Industry understands that not every project would have an alternative scenario available, and is not requesting for an excessive number of alternate scenarios evaluating every line-item in the CESIR cost table.

Some hypothetical examples to illustrate the above discussion -

1. A 5 MW project might trigger a substation transformer upgrade, which might be eliminated by downsizing to 3.2 MW.
2. A 4 MW project might trigger a feeder thermal upgrade of 4/0 to 336 for 2 miles, which might be mitigated by downsizing to 2.6 MW.
3. A 5 MW project triggering a dedicated feeder due to a feeder voltage constraint.
4. A 3 MW project proposing to interconnect to a 4.8kV feeder / substation might trigger a major upgrade to 12.5kV, which downsizing to 1.5MW might enable an interconnection at the existing 4.8kV.

# Industry Request

The Industry would like to standardize the CESIR review process to consider two scenarios when such significant upgrades triggered, one proposed by the Developer and the second proposed by the Utility. Here are some additional issues that need further discussion and collaboration on -

1. Type of system violations / major upgrades that would be considered in evaluating the 2nd option.
2. Understand the methodology and criteria employed to currently provide alternate options in their CESIR, share any lessons learned
3. Explore opportunities for how a developer could request alternate scenarios more proactively
4. Understand the impact of this request on the PSEGLI engineering resources, and potential impact on CESIR study timelines and cost