

December 11, 2020 PJM Interconnection Workshop

Exelon Corporation Comments

January 6, 2021

Introduction

On December 11, 2020, PJM held the second of a series of four workshops to explore potential reform of its interconnection queue process. At this workshop, stakeholders were given the opportunity to provide their perspectives on PJM's existing process. Exelon participated actively in the workshop, sharing some of the challenges that we have identified with the process, as well as potential solutions for stakeholder consideration.¹ At the close of the workshop, PJM announced that it would accept written comments received by January 6, 2021 and will consider those comments as it prepares for the third workshop. Exelon found the discussion at the workshop productive and applauds PJM for hosting this series of workshops. We appreciate the opportunity to reflect on that discussion and provide our additional thoughts.

Generally, and as evidenced by the presentations at the December 11, 2020 workshop, the current interconnection queue process is strained by increases in the volume of interconnection service requests that – paired with certain design elements of the process – are delaying the completion of interconnection studies. These delays are a concern because they affect the transmission owners' ability to reliably interconnect customers while still maintaining the integrity of the grid. At the same time, many interconnection customers desire flexibility (e.g., the ability to modify their interconnection requests after the initial studies are underway or even complete). The current interconnection queue process attempts to accommodate interconnection customers' desire for flexibility where possible; however, providing such flexibility may inadvertently hinder the timely completion of interconnection studies, to the detriment of interconnection customers lower in the interconnection queue.

In our experience, the volume of interconnection requests is not the primary challenge to timely study completion. Rather, it is the many opportunities for interconnection customers to maintain their queue positions despite modifications to their interconnection requests, which negatively affects the processing of subsequent interconnection requests. These changes contribute to time-consuming restudies that may affect the identification of system upgrades and contribute to the reallocation of network upgrade costs, which affect all interconnection requests that are lower in the interconnection queue. In our presentation at the December 11, 2020 workshop, we suggested some short-term modifications to the current interconnection queue process that we believe will help to facilitate the timely completion of interconnection studies, several of which we discuss in these comments. That said, we realize that these targeted changes may not be sufficient to address the delays caused by restudies late in the interconnection process. For this reason, PJM and its members should consider a “first-ready, first served” interconnection process that would allow interconnection requests to independently move forward without being hindered by interconnection requests higher in the queue that are not proceeding in a timely

¹ Exelon's presentation can be accessed on the PJM website at [PJM Interconnection Queue Process Challenges & Recommendations](#).

manner. Exelon would appreciate the opportunity to learn more about PJM's thoughts on the concept of a "first-ready, first-served" interconnection process, as well as for further stakeholder discussion on potential designs for such a process.

In our presentation, Exelon described several challenges associated with the current interconnection queue process that we believe are hindering the timely completion of interconnection studies, especially Facilities Studies. We discuss a few of them in these comments.

Timing of Interconnection Requests

First, there are significant challenges related to the timing of interconnection request submissions. Specifically, Exelon has observed that the majority of interconnection requests are submitted in the last few days of the six-month open queue window. Combined with the current ten-day cure period that begins only after the queue window closes, the influx of interconnection requests submitted at the close of the window creates a significant time crunch for PJM staff because they must review all of these requests to identify deficiencies at once. Given that PJM staff is focused on these reviews and working with interconnection customers to identify and resolve any deficiencies, PJM must often delay model issuance, kickoff meetings with interconnection customers, and, ultimately, study commencement. These delays create further delays later on in the process and reduce the time that transmission owners have to study interconnection requests, making it more difficult for them to timely complete the studies needed to ensure that a resource can be safely and reliably interconnected to the transmission system.

To address these timing issues, Exelon encourages PJM to consider modifications to the structure of its current open queue window. One option would be to shorten the window to four months, allowing for the cure period, kickoff meetings, and other downstream activities to begin immediately after the window closes and conclude in a timelier manner. This proposal would maintain the current interconnection process schedule in that the actual interconnection studies would begin six months after the opening of the queue window but, by allowing certain activities to take place before any studies must commence, would ensure that those studies can begin on time. Alternatively, PJM could establish a "soft" close to the queue window, reserving the last month or two of the six-month window for PJM to work with interconnection customers to resolve any deficiencies in an interconnection request, schedule kickoff meetings, and develop models for transmission owners to study the requests in the queue. While Exelon understands that these proposals would give interconnection customers a little less time to craft their interconnection requests, we believe that the potential to reduce delays in the study process outweighs any added burden.

Models Used in Interconnection Studies

A second group of challenges relates to the models used in interconnection studies. For example, the models developed for use in the interconnection study process do not always align with PJM's Regional Transmission Expansion Plan (RTEP) models. As a result, network upgrades identified in interconnection studies may conflict with system upgrades identified through PJM's RTEP process. To address this issue, Exelon recommends that stakeholders reconsider the modeling assumptions used in interconnection studies. Another challenge that Exelon has

identified is that, at least for certain projects, the point of interconnection can remain unclear throughout the majority of the interconnection process. While we understand that there may be project specific issues that make identification of the specific point of interconnection difficult, the lack of this information creates delays in the study process, reduces the accuracy of study results, and necessitates restudies as better information becomes available. And these consequences are not limited to the interconnection customer whose exact point of interconnection is unknown; the attendant delays, imprecision, and restudies can significantly affect interconnection customers lower in the interconnection queue. Thus, Exelon encourages stakeholders to consider requiring interconnection customers to have site control and property rights earlier in the interconnection process and to have PJM verify these rights at the appropriate time.

An additional challenge related to modeling that Exelon has identified is that transmission owners are not always timely informed when a violation no longer exists or a network upgrade is withdrawn. Consequently, when transmission owners are eventually informed of these changes, they must perform additional analyses and the resulting studies may be delayed. To correct this issue, stakeholders should establish protocols for timely notifying transmission owners of active, withdrawn, and on-hold network upgrades.

Projects Not Entering Into Service

The final set of challenges is probably the most difficult to overcome: the interconnection queue includes a large number of projects that, for a variety of reasons, will never enter service. Some interconnection requests are speculative from the start; project developers submit multiple interconnection requests for a single project with the intention of selecting the location and/or capacity that minimizes their interconnection costs. And if there is any uncertainty for the developer about which project to pursue, the developer can – through design refinements, non-material modifications, and milestone delays – maintain these queue positions for an extended time. The consequences of these speculative interconnection requests are severe. PJM and the transmission owners must expend significant time and resources studying these requests, including performing restudies with each modification or delay, and they must reserve capacity on the system that the interconnection customer will not ultimately need. As a result, other interconnection customers lower in the queue may be subject to delays to accommodate restudies and may be responsible for additional network upgrades costs. Moreover, speculative interconnection requests even affect other interconnection customers when they are finally withdrawn as further restudies will be necessary to once again determine if additional or different network upgrades are needed to support the interconnection of projects that are lower in the queue, creating yet more uncertainty and potentially increasing their interconnection costs.

In our presentation at the December 11, 2020 workshop, Exelon suggested that there might be additional mechanisms that stakeholders could consider to create, tighten, and enforce requirements in the interconnection process that deter speculative interconnection requests and remove requests from the queue when they have gotten “stale.” However, we also believe that it would be valuable for PJM and stakeholders to explore a more fundamental change to the interconnection process: moving from a “first-come, first-served” approach to interconnection to some sort of “first-ready, first-served” approach. While we realize that such an approach would be a departure from the Federal Energy Regulatory Commission’s policies on interconnection and

that there is a long list of implementation details that would have to be worked out,² Exelon believes that a “first-ready, first-served” approach might be the most effective way to address delays in the interconnection process, especially those that are the results of speculative interconnection requests in the queue. Properly implemented, such an approach might benefit all interconnection customers by allowing developers to continue submitting multiple interconnection requests to gain valuable information about interconnection costs without delaying those projects that are ready to move forward. Therefore, Exelon encourages PJM to facilitate further stakeholder discussion on a “first-ready, first-served” approach and how it could be structured. Exelon would be particularly interested in learning more about PJM’s thoughts on the feasibility of such an approach, as well as how it could be most effectively implemented.

Response to Proposals to Modify the Interconnection Process

Lastly, Exelon would like to respond to a few proposals for modifying the interconnection process that were introduced at the December 11, 2020 workshop. To shorten the process, some members suggested that PJM should consider eliminating the Feasibility Study, consolidating certain agreements, or requiring more direct communication between the interconnection customer and the interconnecting transmission owner. Although Exelon understands the desire of certain members to reduce the delays in the interconnection process, we do not believe that these proposals will be effective. For example, eliminating the Feasibility Study might shorten the beginning of the interconnection process, but it will simply lengthen the time that it takes to perform studies later in the process. Consolidating agreements will still require the same amount of time to populate, review, and execute the agreements. And while direct communications between an interconnection customer and the interconnecting transmission owner can be helpful in certain situations, it can also divert the transmission owner’s resources from timely completing the necessary studies.

Conclusion

In conclusion, Exelon appreciates PJM’s willingness to consider stakeholder feedback on the interconnection process. We urge PJM to examine short-term modifications to its current process to reduce delays, such as modifying the structure of its open queue window and improving the models used in interconnection studies. On a longer-term basis, PJM should explore with its members the advantages and disadvantages of different “first-ready, first-serve” approaches to interconnection, as we believe that they may be a more effective solution to the problems caused by speculative interconnection requests in the queue. We look forward to participating in further discussions on the future of PJM’s interconnection process.

² Among many other issues, PJM would have to work out the cost allocation for network upgrades and what it means to be “ready.”