

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

Improvements to Generator Interconnection )      Docket No. RM22-14-000  
Procedures and Agreements )

COMMENTS OF THE  
ELECTRICITY CONSUMERS RESOURCE COUNCIL (ELCON)

The Electricity Consumers Resource Council (ELCON) respectfully submits these comments on the June 16, 2022 Notice of Proposed Rulemaking (NOPR)<sup>1</sup> in the above-captioned docket, in which the Federal Energy Regulatory Commission (FERC or Commission) proposes and seeks comment on potential reforms to address interconnection backlogs, improve certainty, and prevent undue discrimination for new technologies.

ELCON is the national association representing large industrial consumers of electricity. ELCON member companies create a wide range of products from virtually every segment of the industrial community. We own and operate hundreds of major facilities and are significant consumers of electricity in the footprints of all organized markets and other regions throughout the United States. Reliable electricity supply at just and reasonable rates is essential to our members' operations. Further, ELCON members rely on the transmission of electricity by FERC-jurisdictional utilities. Many of ELCON's members also generate electricity and maintain interconnections for excess power sales. Accordingly, any changes to the Commission's generator interconnection policies will have a direct financial impact on ELCON members.

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<sup>1</sup> *Improvements to Generator Interconnection Procedures and Agreements*, Notice of Proposed Rulemaking, 179 FERC ¶ 61,194 (2022).

## SUMMARY

The NOPR's proposed reforms expand on Order No. 845<sup>2</sup> interconnection procedures and are aimed at (1) implementing a first-ready, first-served cluster study process; (2) increasing the speed of interconnection queue processing; and (3) incorporating technological advancements into the interconnection process.<sup>3</sup> Many of the proposed reforms have the potential to reduce the cost and time required to navigate interconnection procedures, including for industrial generation that comprises ELCON's membership. The unprecedented shift towards clean energy resources have flooded generator interconnection queues in multiple regions and the lack of transparency into optimal generation siting has caused backlogs and the need for numerous restudies as projects drop out of the queue. This uncertainty on the part of both the transmission provider and the generator project developer inevitably leads to an increase in costs to consumers. As the NOPR points out, "[t]hese delays faced by individual interconnection customers may hinder the timely development of new generation, and, thereby, stifle competition in wholesale energy markets or delay access to potential low cost generation, which ultimately drive up costs for consumers."<sup>4</sup>

ELCON generally supports the Commission's actions in this NOPR to institute first-ready first-served cluster studies with increased financial commitments and milestones. The proposal to publicly post transmission system data and develop an informational study process before entering the queue provides necessary transparency and will hopefully lead to fewer speculative project submissions clogging up the queue and causing delays with numerous re-studies when those projects ultimately drop out of the queue. While some flexibility is important, standardization of these processes ensure greater clarity and consistency.

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<sup>2</sup> *Reform of Generator Interconnection Procs & Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018), *order on reh'g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019), *order on reh'g*, Order No. 845-B, 168 FERC ¶ 61,092 (2019).

ELCON also seeks implementation of an independent transmission monitor (ITM) to ensure that there is coordination among the interconnection process and the transmission planning process as they are naturally intertwined. The ITM can also help with sharing and interpreting transmission system data to assist generation developers choose the most beneficial and cost-effective location for interconnecting with the grid.

## **I. INCREASED TRANSPARENCY PROVIDES BETTER DECISION-MAKING IN THE GENERATOR INTERCONNECTION PROCESS**

The NOPR highlights one of the most common impediments to the efficient and timely processing of generator interconnection requests – the proliferation of queue withdrawals by speculative projects and the resulting cascade of interconnection re-studies.<sup>5</sup> As project developers lower in the queue become saddled with unanticipated costs due to the withdrawal of higher-queued projects, they too may decide that their interconnection request is no longer financially feasible and thus withdraw as well, subsequently requiring another round of re-studies. Re-studies further delay processing of interconnection requests, which in turn drives uncertainty into the viability of generation projects.<sup>6</sup> While there are inevitably some project developers that “game” this system to their advantage by submitting multiple speculative requests, most project developers act in good faith but lack the insight into transmission system conditions to make well-informed decisions regarding optimal location of their generating facilities and timing of their development. Timing and location are

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<sup>3</sup> NOPR at P 4.

<sup>4</sup> *Id.* at P 27.

<sup>5</sup> *See id.* at P 26, “In the case where the interconnection customer submits multiple requests, the developer may select only the one or two most viable project candidates and withdraw the interconnection requests for the remaining projects. These withdrawals then impact the remaining interconnection customers in the interconnection queue. A withdrawal may necessitate re-studies and cause the shifting of network upgrade costs to lower-queued interconnection customers. New cost estimates, in turn, can alter a proposed generating facility’s commercial viability and create further re-studies and withdrawals, often referred to as cascading re-studies and withdrawals.”

<sup>6</sup> *See id.* at P 30.

particularly crucial as they can have significant impacts on the costs of the project, financing for the project, and attracting offtakers.

These withdrawals and delays can lead to generation projects no longer being viable due to escalating and unanticipated costs. Most concerning is that these increased costs negatively impact end-use customers of electricity as well. As the NOPR states,

Unnecessary interconnection costs, either on the part of project developers or transmission providers, are ultimately passed through to consumers through higher energy or transmission rates, respectively. Conversely, efficient interconnection queues and well-functioning wholesale markets deliver enormous benefits to consumers by driving down wholesale electricity costs.<sup>7</sup>

Recognizing that the current interconnection study process results in unjust and unreasonable rates, the Commission proposes to increase transparency through early access to system condition information through the posting of available data on transmission provider websites. ELCON strongly endorses these transparency proposals and noted in the Order No. 845 proceeding that “increased transparency can lead to efficiencies in the development process, a reduction in uncertainty in the development process, and limited potential for disagreements to arise.”<sup>8</sup>

**A. Informational Studies Provide Crucial Information and Can Reduce Interconnection Queue Withdrawals.**

The Commission proposes to require transmission providers to conduct informational interconnection studies, upon request, to assist generation project developers ascertain the potential upgrades and costs of certain configurations at specific interconnection points.<sup>9</sup> Rather than randomly selecting numerous points of interconnection to achieve the best generator interconnection study queue position,

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<sup>7</sup> *Id.* at P 30.

<sup>8</sup> Comments of the Electricity Consumers Resource Council, Docket No. RM17-8-000, at 6 (filed Apr. 13, 2017) (ELCON Order No. 845 Comments.)

<sup>9</sup> *See* NOPR at P 42.

project developers seeking interconnection will be able to collect the data necessary to make informed decisions regarding optimal facility placement. Armed with this information, project developers can pinpoint the most beneficial configuration for their generating facility and the probable costs associated with necessary equipment and system upgrades to successfully connect to the transmission system, thereby reducing the likelihood of withdrawal once in the generator interconnection queue.

Transmission providers must use the most credible data to accurately estimate system upgrade costs as the key goal of this increased transparency is to reduce queue withdrawals and cascading restudies. The lack of commercial viability of a project and an escalation of unexpected costs are the prevalent reasons for queue withdrawals disrupting the timely and cost-effective processing of interconnection requests.<sup>10</sup> ELCON cautions, however, not to overextend transmission provider resources for these informational studies so as to further delay actual interconnection studies. As discussed more fully below, the designation of an Independent Transmission Monitor (ITM) could supplement transmission provider staff and assist with conducting informational studies. In addition, by designating specific windows for informational studies and limiting informational study requests to five per project developer, transmission providers can ensure they are properly staffed and funded.

In addition to limiting the number of informational study requests, project developers would be required to pay \$10,000 per request in an effort not to overwhelm transmission provider resources with numerous, speculative project proposals. ELCON suggests that a staggered fee approach would further deter multiple requests. For

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<sup>10</sup> *Id.* at P 26, “Often, these more speculative interconnection requests do not prove to be commercially viable... A lack of commercial viability often means that many proposed generating facilities in the interconnection queue will eventually withdraw after not finding a purchaser for their output... These withdrawals then impact the remaining interconnection customers in the interconnection queue. A withdrawal may necessitate re-studies and cause the shifting of network upgrade costs to lower-queued interconnection customers. New cost estimates, in turn, can alter a proposed generating facility’s commercial viability and create further re-studies and withdrawals, often referred to as cascading re-studies and withdrawals. These re-studies exacerbate the cost uncertainty faced by interconnection customers... .”

instance, the first informational study request would be set at \$10,000 and a second pending request would incur a fee of \$15,000 and so on. This fee proposal also could help alleviate transmission provider staffing and resource costs for the informational study requests.

ELCON believes that the Commission's informational study proposal strikes the right balance in increasing transparency while preventing an influx of speculative requests. This proposal would alleviate abuses and shortcomings from both parties by requiring an equal burden to act in good faith.

**B. Publicly Posted Interactive Data Provides Additional Transparency While Potentially Reducing the Need for Numerous Re-studies.**

There are several benefits in the Commission's proposal requiring the public posting of certain real-time transmission system conditions and the consequences of certain injections.<sup>11</sup> First, generation project developers will be armed with real world demonstrations of the impacts of specific project configurations to the transmission system. With this data, project developers could be better prepared for the informational study process or forgo the process altogether, saving time and resources and thus costs.

With enough information to potentially forgo the informational study process, generation project developers can reduce costs through fewer requests. For example, a project developer could enter a specific project configuration into the interactive database that demonstrates a particular negative effect on transmission capacity, requiring expensive upgrades. Not only does this information deter a project developer from unnecessary costly upgrades, but it also eliminates the information study request and the associated fee for that proposed configuration. This particular configuration also is avoided in the formal interconnection study process and any resulting re-studies.

Both time and money are spared for the transmission provider and the project

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<sup>11</sup> See *id.* at P 51.

developer, which ultimately saves costs for the consumer. Here again, the NOPR seeks to balance responsibility and benefit among transmission providers and generation project developers seeking interconnection.

**C. Specified Deadlines Instill Discipline and Certainty in the Interconnection Study Process.**

The proposed elimination of the “reasonable efforts” standards creates increased transparency in the timing of the interconnection study process.<sup>12</sup> Firm study deadlines and associated penalties provide the transmission provider, and any affected system, an incentive to use its resources efficiently while providing the project developer with greater certainty which could lead to better financing terms or better procurement of power purchase agreements.<sup>13</sup> To be effective, the penalties must be sufficient to deter transmission providers from delaying or prolonging studies.

The standardization of the affected systems study process has been necessary for some time. While the Commission attempted to rectify inconsistencies in the process in Docket No. AD18-8000, affected system transmission providers had little incentive to move toward a more coordinated and consistent practice. This led to mismatches in study periods resulting in delays in the interconnection process where the transmission provider and the project developer seeking interconnection had no control or remedy. Worse yet, delays of affected system studies result in failures to point out costly impacts early in the process, potentially causing project developers to withdraw at a much later time, triggering numerous re-studies. As noted in the NOPR, “[f]irm deadlines ensure that the notification process advances expediently and that the obligations of each party are clear.”<sup>14</sup> Not only do the proposed deadlines reinforce a standard affected system study practice, but the accompanying penalties for delay ensure that the affected system has “skin in the game.” However, such penalties and deadlines can only be enforced

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<sup>12</sup> See *id.* at P 168.

<sup>13</sup> See *id.* at P 30.

<sup>14</sup> *Id.* at P 185.

against the affected system for delays on its part. Should a project developer seeking interconnection fail to provide the necessary data to study the impacts on the affected system, that developer could be subjected to removal from the cluster or queue and could be required to re-enter the interconnection queue or pay a penalty to keep its queue position.

Moreover, ELCON suggests that standardization of affected study agreements, modeling, and assumptions furthers certainty and accountability, resulting in a more transparent, efficient, and cost-effective interconnection process.

**D. The Annual Informational Report Provides Transparency in the Efficacy of Advanced Grid Technologies.**

As more fully discussed below in Section II, the Commission should encourage the consideration of grid enhancing technologies (GETs) when evaluating the need for transmission system upgrades, potentially saving project developers from costly upgrades. Annual informational reports by the transmission provider on the evaluation and adoption of GETs or other alternate transmission technologies provide the project developer with additional information to ascertain the feasibility of certain configurations and interconnection points.<sup>15</sup> As GETs tend to be more cost effective than system upgrades, the project developer would be well served to understand the potential of GETs and discern any obstacles to adoption.

**II. PROCESS REFORMS WILL INCREASE DISCIPLINE, CONSISTENCY, AND ACCOUNTABILITY IN THE GENERATOR INTERCONNECTION PROCESS**

The Commission proposes several commonsense reforms in an effort to improve the generator interconnection study process. First and foremost, the proposal to conduct cluster studies of first-ready, first-served projects significantly improves the efficiency of the interconnection study process from the current serial first-come, first-served model. In combination with increased transparency measures discussed above, the cluster study of first-ready projects will alleviate the inefficient process of studying

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<sup>15</sup> *Id.* at P 302.



one project at a time, regardless of its viability or progress. In this manner, only those projects that demonstrate certain milestones would be studied, therefore discouraging purely speculative projects fishing for an ideal queue position and then withdrawing once upgrade costs are established. However, cluster studies should not be entirely mandated and only would be used when and where it makes sense geographically or topologically for commercially ready projects.

Cluster studies also help improve the efficiency of the process and create more equitable cost allocation for upgrades. By studying one group of viable projects in geographical proximity, any upgrade costs or withdrawals affect only the cluster group and shields other lower-queued projects from re-study or unreasonable upgrade costs. Similarly, no one project in the cluster would be assessed the full cost of the studies or the upgrades which often negatively impacts project viability and leads to withdrawals, triggering re-studies, and ultimately costing consumers more. ELCON agrees with the NOPR's assertion that the megawatt size and number of projects in a cluster have a significant impact on study costs and believes that there should be some flexibility assessing and assigning study cost allocations proportional to project impacts.<sup>16</sup> Should any one project in the cluster have an outsized impact on the grid compared to other projects in the cluster, those projects should be protected from exorbitant upgrade costs to accommodate a project that may not be suitably located.

Clusters also solve the free ridership conundrum by preventing lower-queued projects from benefiting from upgrades without sharing in the upgrade costs thus violating the "cost causation" principle.<sup>17</sup> Should lower-queued projects in a separate cluster benefit from upgrades in another cluster, those projects also should be allocated a portion of those upgrade costs.<sup>18</sup>

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<sup>16</sup> See *id.* at PP 82-83.

<sup>17</sup> See *id.* at P 55.

<sup>18</sup> *Id.* at P 98.

The proposed increases in fees, milestones (including site control and commercial readiness), and penalties could also improve accountability and discipline on the part of the generation project developer. Again, such readiness and financial obligations would deter project developers from flooding the interconnection queue with multiple speculative configurations. While not commenting on the specific dollar amounts of the fees and penalties, ELCON believes that all financial commitments and penalties should be severe enough to discourage the practice of “fishing” for queue positions and withdrawing, instead of such dollar amounts being inconsequential and a mere cost of doing business. However, the Commission should strike a balance between deterring undesirable behavior without being overly burdensome to serious project developers.

ELCON also supports the proposal to study co-located generation resources as one interconnection request.<sup>19</sup> As the generation mix continues to evolve toward renewable and variable resources, there is an increasing number of co-located facilities, especially a generation source paired with storage. When both resources are behind the same point of interconnection, it stands to reason that the project’s impacts on the grid should be studied according to its operational parameters and not as separate resources. Similarly, ELCON encourages the Commission to adopt the proposal to study interconnection impacts according to the facility’s actual operating output rather than its nameplate capacity as long as operational controls are installed and operational parameters are enforced. In addition, facilities such as storage facilities should be studied according to actual charging and dispatch rather than assuming that these will fully withdraw or inject power during peak load conditions. This applies to variable resources that respond to weather conditions and time of day. Assuming that all resources are injecting, or charging in the case of storage, according to their full capacity at all times risks overbuilding system upgrades, sending incorrect price signals to new generation, and raising costs for consumers. As ELCON noted regarding Order No.

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<sup>19</sup> See *id.* at P 244.

845, “[t]he interconnection process for an industrial cogenerator or other behind-the-meter industrial generation should recognize the maximum net put to the grid and not the generator’s nameplate rating.”<sup>20</sup>

Finally, transmission providers should consider GETs or other alternative technologies as standard practice when determining the impacts and potential upgrades necessary for interconnection to the grid.<sup>21</sup> GETs have the ability to measure conditions in real-time and optimize transmission capacity or power flow control. These technologies have the potential to be less costly than system upgrades and would increase customer savings. In each cluster study, GETs and other alternative technologies should be studied as either temporary measures while upgrades are being constructed or as a long-term alternative to upgrades. Project developers should not bear the burden of requesting evaluation of these technologies and therefore consideration of these technologies should not be contingent on the express request of the project developer. In other words, consideration of GETs should be automatic.

### **III. AN INDEPENDENT TRANSMISSION MONITOR WOULD COORDINATE THE TRANSMISSION PLANNING PROCESS WITH THE GENERATOR INTERCONNECTION PROCESS**

Although raised in the Transmission Planning, Cost Allocation, and Generator Interconnection Advanced Notice of Proposed Rulemaking (ANOPR),<sup>22</sup> once again the concept of an Independent Transmission Monitor (ITM) was not referenced in the subject NOPR. In the ANOPR, the Commission sought input into “whether such monitoring should extend to oversight of the generator interconnection process.”<sup>23</sup> As transmission planning and generator interconnection are intertwined, it makes sense

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<sup>20</sup> ELCON Order No. 845 Comments at 7.

<sup>21</sup> See NOPR at P 297.

<sup>22</sup> *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Advanced Notice of Proposed Rulemaking, 176 FERC ¶ 61,024 at PP 163-175 (2021).

<sup>23</sup> ANOPR at P 175.

that an ITM would have oversight authority over both processes. The ITM Coalition stated in Docket No. RM21-17-000, “the role of the ITM would not be limited to transmission planning but could extend into ensuring transparency and fairness in interconnection studies.”<sup>24</sup> In the generator interconnection study process, the ITM could assist transmission providers with informational studies, surveying system conditions and potential impacts while also providing independent assistance to the generation developer in forming its interconnection request.

The ITM would ensure that engagement meetings and the interconnection study process were conducted according to the tariff while assisting with data analysis, assumptions, and conclusions. As referenced above, an ITM would ensure that GETs and other alternative technologies are considered and evaluated during the cluster study before resorting to costly and potentially unnecessary system upgrades. The ITM could monitor the costs of system upgrades to protect against unexpected escalations in cost compared to the transmission provider’s estimate and ensure fiscal responsibility for all parties in a cluster.

Should disagreement arise between the transmission provider and the project developer seeking interconnection, the ITM could serve as a mediator in negotiations before submitting a complaint or an unexecuted generator interconnection agreement to FERC, potentially saving time and resources for all parties involved. The ITM would have the ability to make filings at FERC to raise any concerns with the interconnection process and would be tasked with preparing and filing periodic interconnection reports noting any trends in requests and study findings and evaluating the progress in interconnection queue processing. The ITM would be responsible for issuing the annual report regarding the consideration of GETs as a network upgrade solution and explaining why GETs were or were not adopted.

Finally, the ITM would assist in coordinating the transmission planning process

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<sup>24</sup> Reply Comments of the ITM Coalition, Docket No. RM21-17-000 at 9-10 (filed Sept. 25, 2022).

with the generator interconnection process so that each informs the other in a cohesive understanding of grid conditions and potential transmission solutions. As highlighted by numerous panelists at the October 6, 2022 technical conference on transmission planning and cost management, there is a fundamental lack of transparency in transmission planning assumptions and decisions with little insight into whether there are more cost-effective solutions that would save costs to consumers. Many echoed their support for an ITM to fill these gaps in information and ensure that the most beneficial solutions have been considered and ultimately chosen.

## CONCLUSION

ELCON appreciates the Commission's efforts to enhance the efficient processing of generator interconnection studies to alleviate the severe backlogs in certain interconnection queues. As discussed above, ELCON supports the NOPR's reasonable reforms that will hopefully increase transparency, instill discipline and consistency in the process, while protecting consumers from unjust and unreasonable costs.

Respectfully submitted,

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Dated: October 13, 2022