

166 FERC ¶ 61,076  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;  
Cheryl A. LaFleur and Richard Glick.

Public Service Company of Colorado

Docket No. ER19-366-000

ORDER ON TARIFF FILING

(Issued January 31, 2019)

1. On November 19, 2018, Public Service Company of Colorado (PSCo) submitted, under section 205 of the Federal Power Act (FPA),<sup>1</sup> proposed revisions to its Large Generator Interconnection Procedures (LGIP) and Large Generator Interconnection Agreement (LGIA) contained in Attachment N of the Xcel Energy Operating Companies Open Access Transmission Tariff.<sup>2</sup> In this order, we reject the proposed tariff revisions without prejudice, as discussed below.

**I. Background**

**A. History of Interconnection Queue Procedures**

2. In Order No. 2003,<sup>3</sup> the Commission required public utilities that own, control, or operate transmission facilities to file standard generator interconnection procedures and a standard agreement to provide interconnection service to generating facilities with a capacity greater than 20 megawatts (MW). To this end, the Commission adopted the

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<sup>1</sup> 16 U.S.C. § 824d (2012).

<sup>2</sup> PSCo is a wholly-owned subsidiary of Xcel Energy, Inc. (Xcel Energy). PSCo is the designated eTariff filing entity for the Xcel Energy Tariff, consistent with the requirements of Order No. 714. *Electronic Tariff Filings*, Order No. 714, FERC Stats. & Regs. ¶ 31,276 (2008).

<sup>3</sup> *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

*pro forma* LGIP and LGIA, and required all public utilities subject to Order No. 2003 to modify their tariffs to incorporate the *pro forma* LGIP and LGIA. Transmission providers were also permitted to seek variations from the *pro forma* LGIP and LGIA if they were “consistent with or superior to” the terms of the *pro forma* LGIP and LGIA.<sup>4</sup>

3. In response to concerns about the effectiveness of queue management in RTO and ISO regions, the Commission held a technical conference on December 11, 2007 in Docket No. AD08-2-000. In the order following the technical conference, the Commission directed the RTOs and ISOs to file reports on the status of their efforts to improve the processing of their interconnection queues and provided guidance to assist RTOs and ISOs and their stakeholders in those efforts. Specifically, the Commission stated its belief that there are three types of variations that, individually or in combination, could speed up queue processing while remaining faithful to the goals of Order No. 2003: (1) increasing the requirements for obtaining and keeping a queue position, such as increasing deposit amounts; (2) eliminating the interconnection feasibility study as a separate step to reduce processing time without harming interconnection customers; and (3) instituting a first-ready, first-served approach, under which customers who demonstrate the greatest ability to move forward with project development are processed first.<sup>5</sup>

4. In Order No. 845,<sup>6</sup> the Commission revised the *pro forma* LGIP and LGIA to implement specific reforms designed to improve certainty for interconnection customers,

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<sup>4</sup> Order No. 2003, 104 FERC ¶ 61,103 at P 825. The Commission also permitted transmission providers to justify a variation to the *pro forma* LGIP or LGIA based on regional reliability requirements, and required transmission providers to submit these regional reliability variations to the Commission for approval under the relevant reliability standard. In addition, with regard to regional transmission organizations and independent system operators (RTOs/ISOs), the Commission stated that it would allow independent entity variations for pricing and non-pricing provisions, and that RTOs/ISOs “shall have greater flexibility to customize [their] interconnection procedures and agreements to fit regional needs.” *Id.* P 826.

<sup>5</sup> *Interconnection Queuing Practices*, 122 FERC ¶ 61,252, at PP 16-18 (2008) (2008 Order).

<sup>6</sup> *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018).

promote more informed interconnection decisions, and enhance the interconnection process.<sup>7</sup>

## **B. PSCo's Current Interconnection Process**

5. PSCo currently processes interconnection requests in a serial manner, consistent with the *pro forma* LGIP.<sup>8</sup> In order to accommodate State of Colorado integrated resource planning and competitive acquisition requirements, PSCo's current LGIP also includes resource solicitation procedures that allow a soliciting load-serving entity to request a queue position as agent for bidders participating in a Resource Solicitation Process.<sup>9</sup> With a single queue position for the load-serving entity, PSCo can perform clustered feasibility and system impact studies on different combinations of bids in the solicitation and determine system and upgrade costs for each combination.<sup>10</sup>

6. In March 2018, PSCo filed a request to revise Article 5.16 of its *pro forma* LGIA to limit the terms under which an interconnection customer could place a project in suspension. In the filing, PSCo argued that the proposed revisions to its LGIA were needed because its serial study process, and numerous restudies, has resulted in a significant interconnection request backlog. The Commission rejected the filing, finding that PSCo had not demonstrated that its proposal to amend the suspension provision of its LGIP was consistent with or superior to the *pro forma* LGIA.<sup>11</sup> However, the Commission encouraged PSCo to work with its stakeholders to develop potential reforms to the PSCo interconnection procedures to help alleviate its interconnection queue problems.<sup>12</sup>

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<sup>7</sup> *Id.* P 2. On October 3, 2018, the Commission's Secretary issued a notice extending the compliance date for Order No. 845 to 90 days following the Commission's issuance of an order addressing pending requests for rehearing of Order No. 845. Notice of Extension of Compliance Date, Docket No. RM17-8-000 (Oct. 3, 2018).

<sup>8</sup> Under PSCo's serial processing queue, if a higher-queued generator modifies its project or withdraws from the queue, all lower-queued projects may need to be restudied.

<sup>9</sup> *Xcel Energy Operating Cos.*, 109 FERC ¶ 61,072 (2004).

<sup>10</sup> PSCo Transmittal Letter at 8-9.

<sup>11</sup> *Pub. Serv. Co. of Colo.*, 163 FERC ¶ 61,146, at PP 30, 33-34 (2018) (May 2018 Order).

<sup>12</sup> *Id.* P 34.

### C. Filing

7. PSCo states that it has a native load of approximately 6,900 MW and a peak load in its balancing authority area of approximately 8,500 MW. PSCo states that it currently has over 23,000 MW of generation interconnection requests pending in its LGIP interconnection queue, virtually all of which are for network resource interconnection service<sup>13</sup> to deliver power to load in the PSCo balancing authority area. PSCo states that in order to alleviate the existing interconnection queue backlog and to avoid backlogs in the future it is proposing revisions to its LGIP (Revised LGIP) and revisions to its LGIA (Revised LGIA) to transition from a first-come, first-served approach to a first-ready, first-served approach (Reform Proposal).<sup>14</sup> PSCo represents that its proposal is consistent with or superior to the procedures promulgated under Order No. 2003.

8. PSCo's Revised LGIP would implement two distinct study processes: (1) the Informational Interconnection Study; and (2) the Definitive Interconnection Study Process. First, PSCo's proposed Informational Interconnection Study is an optional, customizable study intended to help potential interconnection customers (i.e., customers that are not ready to enter the interconnection queue) evaluate their project's interconnection feasibility prior to entering the interconnection queue.

9. PSCo states that the Informational Interconnection Study would provide greater flexibility to potential interconnection customers that are not fully ready by delivering interconnection study results without requiring that such interconnection customers enter the queue. PSCo represents that although the Informational Interconnection Study is modeled after and replaces the optional study from the Order No. 2003 *pro forma*

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<sup>13</sup> Network resource interconnection service is an interconnection service that allows the interconnection customer to integrate its Large Generating Facility with the transmission provider's transmission system (1) in a manner comparable to that in which the transmission provider integrates its generating facilities to serve native load customers; or (2) in an RTO or ISO with market based congestion management, in the same manner as all other network resources. In contrast, energy resource interconnection service authorizes the interconnection customer to connect its generating facility to the transmission provider's transmission system to be eligible to deliver the generating facility's electric output using the existing firm or non-firm capacity of the transmission provider's transmission system on an "as available" basis. Order No. 845, 163 FERC ¶ 61,043 at P 469 n.828, n.830.

<sup>14</sup> For the purposes of this order, we refer to PSCo's proposed revisions to its LGIP and LGIA collectively as PSCo's "Reform Proposal."

LGIP,<sup>15</sup> it provides more flexibility for interconnection customers. PSCo explains that interconnection customers will be able to request that PSCo perform an Informational Interconnection Study at any time, instead of only after completion of the system impact study as required by PSCo's current LGIP. In addition, PSCo states that the Informational Interconnection Study will allow the interconnection customer to study almost any interconnection scenario as well as the effect of other clustered generation on a specific interconnection request. PSCo notes that Informational Interconnection Studies are for information only and are not queued studies. PSCo states that the Informational Interconnection Studies will be performed at the interconnection customer's expense, and proposes to require a \$10,000 deposit subject to true-up based on actual costs.<sup>16</sup>

10. Second, PSCo's proposed Definitive Interconnection Study Process is intended for projects that are ready to move toward interconnection. PSCo explains that this process starts with a Definitive Interconnection System Impact Study (DISIS), which, among other things, merges PSCo's existing interconnection feasibility and system impact studies and replaces the current serial interconnection study process with a clustered interconnection study process that will occur on a semi-annual basis.

11. With regard to the initiation of a cluster, PSCo states that to be considered in a cluster under the DISIS process (a DISIS Cluster), interconnection customers must submit a valid interconnection request before the close of the DISIS Window for the cluster. PSCo proposes to open two DISIS Cluster windows annually. Each window will be open for a 45-day period, with one window opening on February 1 and the other window opening on August 1.<sup>17</sup>

12. In addition, PSCo proposes to require the interconnection customers to provide the following items as part of a valid interconnection request: a non-refundable application fee of \$5,000 and a study deposit; a completed application in the form of Appendix 1 of the Revised LGIP, including applicable technical information needed for modeling; a demonstration of 50 percent site control of the generating facility; a point of

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<sup>15</sup> Under the *pro forma* LGIP, an interconnection customer may ask the transmission provider to perform a reasonable number of optional interconnection studies. An optional interconnection study is a sensitivity analysis based on assumptions provided by the interconnection customer used to identify any network upgrades that may be required to provide transmission delivery service over alternative transmission paths.

<sup>16</sup> PSCo Transmittal Letter at 28.

<sup>17</sup> *Id.* at 35. We note that PSCo's proposed definition of DISIS Cluster appears incorrect, as it is identical to the proposed definition of DISIS. *Id.* at 32. n.153.

interconnection; the point of delivery if the request is for network resource interconnection service; the generating facility size in MW; and the first readiness milestone.<sup>18</sup>

13. PSCo proposes to continue to offer a resource planning entity the ability to initiate a Resource Solicitation Cluster, which is a cluster study that is separate from clusters initiated through the DISIS Window and is intended to study projects that the resource planning entity is considering acquiring pursuant to a “process authorized or required by Applicable Laws and Regulations for the acquisition of Network Resources.”<sup>19</sup> PSCo states that a resource planning entity may request a Resource Solicitation Cluster at any time, and PSCo will work with that resource planning entity to determine the scope and timeline to initiate the Resource Solicitation Cluster; however, all Resource Solicitation Clusters must respect the queue position of any ongoing cluster studies. PSCo further states that the proposed study process and requirements for interconnection requests in a Resource Solicitation Cluster and a DISIS Cluster are the same: both would be subject to the same Definitive Interconnection Study Process described below. PSCo proposes to allow interconnection customers to retain a queue position in both cluster types (i.e., the Resource Solicitation Cluster and DISIS Cluster) during the first two phases of the Resource Solicitation Cluster, consistent with PSCo’s existing LGIP.<sup>20</sup>

14. PSCo’s Reform Proposal includes a 75-day customer engagement window that will begin after interconnection customers submit their interconnection requests and before the start of the Definitive Interconnection Study Process for each cluster. PSCo states that the customer engagement window will serve as a time for interconnection customers to determine whether they are ready and truly want to enter the Definitive Interconnection Study Process. PSCo explains that during the customer engagement window it will work with interconnection customers to build models, verify data, hold stakeholder meetings, and generally prepare for the DISIS. In addition, within 10 days of the start of the customer engagement window, PSCo will publish to its Open Access Same-Time Information System (OASIS) a list of all interconnection requests for that cluster. PSCo states that this will allow customers to know what other projects are

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<sup>18</sup> *Id.* at 29-31. PSCo’s proposed readiness milestones are explained in section III.C.2 below.

<sup>19</sup> *See* Definition of Resource Solicitation Process, Revised LGIP.

<sup>20</sup> PSCo Transmittal Letter at 35-37.

seeking to interconnect in that cluster and thus estimate the potential scope of upgrade costs.<sup>21</sup>

15. PSCo notes that during the customer engagement window, interconnection customers will not have signed a study agreement and any study deposits provided with the interconnection request are fully refundable. At the end of the customer engagement window, all interconnection requests deemed sufficient that have an executed DISIS Agreement will be included in that DISIS Cluster and PSCo will initiate the Definitive Interconnection Study Process.<sup>22</sup>

16. PSCo states that the Definitive Interconnection Study Process consists of three DISIS phases, followed by an individual interconnection facilities study phase. PSCo explains that the three DISIS phases are as follows: (1) an initial power-flow and voltage study; (2) a stability and short circuit study; and (3) a restudy, if necessary. PSCo also proposes to require demonstrations of readiness in the form of readiness milestones (Milestones 1-5) and increasing levels of Site Control that must be satisfied before moving to the next phase.<sup>23</sup>

17. PSCo states that the Phase 1 power-flow and voltage study is similar to a feasibility study under the *pro forma* LGIP and is expected to identify the majority of required network upgrades. PSCo further states that the results from Phase 1 provide the interconnection customer with a “free look” at its costs to interconnect. PSCo proposes to refund the Milestone 1 payments of interconnection customers that withdraw after seeing these initial results, but before committing to move on to Phase 2. PSCo states that in allowing Phase 1 to be a nearly risk free option, it seeks to strike a balance between flexibility and certainty. However, PSCo notes that allowing Phase 1 to be nearly risk free could result in a significant number of projects that are not ready projects entering this first phase.<sup>24</sup>

18. PSCo states that Phase 2 completes the traditional system impact study by adding stability and short circuit analysis to the power-flow analysis. If interconnection customers withdraw at the end of Phase 2, or if other modifications create a need for restudy, the cluster will proceed to Phase 3 for a system impact restudy (i.e., the power-flow, voltage, stability, and short circuit analysis is repeated to account for any

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<sup>21</sup> *Id.* at 37-38.

<sup>22</sup> *Id.*

<sup>23</sup> *Id.* at 38.

<sup>24</sup> *Id.* at 39.

withdrawn projects).<sup>25</sup> If no interconnection requests withdraw after the Phase 2 study report is published, or at the end of Phase 3 once the cluster is deemed stable, the cluster will move to Phase 4, the interconnection facilities study. PSCo states that Phase 4 is followed by LGIA negotiation and execution.<sup>26</sup>

19. To transition interconnection customers into the first-ready, first-served process, PSCo proposes to revise section 5 of its LGIP to include three options, depending on a project's readiness. PSCo states that allowing all current interconnection customers to remain in the queue would undermine its proposed reform because PSCo's current inability to study any new network resource interconnection service interconnection requests would continue into the new cluster study process. PSCo states that it has established three options for projects in the current PSCo queue: (1) the transitional serial process; (2) the transitional cluster process; and (3) withdrawal from the queue and reentry into the queue in a future DISIS Cluster.<sup>27</sup>

20. As proposed, interconnection customers with a final system impact study report and an interconnection facilities study agreement signed prior to November 1, 2018, are eligible to enter the transitional serial process. Interconnection customers with an assigned queue position prior to November 1, 2018, are eligible to enter the transitional cluster process. In addition, PSCo explains that in order to enter the transitional serial or the transitional cluster process, a project must demonstrate readiness.<sup>28</sup> Specifically, PSCo states that an interconnection customer must: (1) provide a deposit for transmission provider's interconnection facilities and network upgrades;<sup>29</sup> (2) demonstrate exclusive site control; (3) sign a transitional interconnection agreement; and (4) provide one of the following: an executed contract for sale; evidence that the generation facility is included in an approved Resource Plan; or a filed Provisional Large Generator Interconnection Agreement. PSCo proposes to require interconnection

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<sup>25</sup> PSCo states that if a project is selected in the Resource Solicitation Process at the end of Phase 2, the project must then withdraw from the DISIS Cluster.

<sup>26</sup> *Id.* at 40.

<sup>27</sup> *Id.* at 59-60.

<sup>28</sup> *Id.*

<sup>29</sup> PSCo proposes study deposits of 100 percent of the costs identified in the system impact study report for the serial transition process, and \$5 million to be reconciled with the costs determined in the transitional cluster study in the transitional cluster process.

customers to make this readiness demonstration during a 15 day window from the effective date of the tariff (i.e., February 1-15, 2019).<sup>30</sup>

21. In support of its proposed Reform Proposal, PSCo states that it has experienced a surge in interconnection requests that cannot be processed under its current LGIP.<sup>31</sup> PSCo represents that because the amount of generation requesting interconnection is significantly greater than the region's needs, only a small fraction of the generating projects making interconnection requests are likely to reach commercial operation. In addition, PSCo states that, due to the configuration of the PSCo system and the fact that most requests are for network resource interconnection service, almost all lower-queued requests, regardless of study phase, are affected by changes to higher-queued projects.<sup>32</sup> PSCo states that the sheer number of interconnection requests and amount of generation seeking to interconnect vastly outstrip the amount of load to which the output from those potential generating facilities can sink. Therefore, PSCo represents, it is impossible for PSCo to model the majority of the existing requests for network resource interconnection service, as well as any new requests it may receive in the future.<sup>33</sup>

22. PSCo argues that speculative projects interrupt the efficient processing of interconnection requests from ready-to-interconnect generation. PSCo states that when a speculative project advances through the queue and executes an LGIA, there is little cost to the interconnection customer if it then immediately places the project in suspension.<sup>34</sup> PSCo also notes that a lower-queued project's interconnection facilities or network upgrades may vary significantly from its original configuration depending on a higher-queued customer's ultimate commercial operation date. Therefore, PSCo asserts, projects in the interconnection queue entering suspension create significant uncertainty for lower-queued projects regarding interconnection costs, including network upgrade costs. PSCo notes that this is particularly problematic for wind and solar resources that

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<sup>30</sup> *Id.*

<sup>31</sup> *Id.* at 2.

<sup>32</sup> *Id.* at 10-12.

<sup>33</sup> *Id.* at 3.

<sup>34</sup> Under Article 5.16 of the PSCo LGIA, an interconnection customer can suspend all work related to the construction and installation of facilities by the transmission provider for up to 3 years.

are trying to achieve commercial operation prior to expiration or phase-down of federal Production Tax Credits or Investment Tax Credits.<sup>35</sup>

23. PSCo states that because its current LGIP can no longer handle the volume and nature of the current interconnection requests in the queue, it has developed the Reform Proposal. PSCo represents that the Reform Proposal will provide more flexibility for developers to obtain specific interconnection information prior to entering the queue, and will provide greater certainty to developers by only incentivizing ready projects to enter the queue.<sup>36</sup>

24. PSCo states that its Revised LGIP and LGIA are consistent with or superior to the Order No. 2003 *pro forma* LGIP and LGIA. PSCo also states that it engaged in an extensive stakeholder process and is confident that its Reform Proposal will help address the problems facing the PSCo system. PSCo acknowledges that future adjustments may be needed to the Reform Proposal, and commits to review the effectiveness and efficiency of the process and file an informational report with the Commission after two years. PSCo states that it is requesting an effective date of February 1, 2019, so that it can efficiently interconnect ready projects to the PSCo transmission system. PSCo states that it plans to open the first DISIS Window on the February 1, 2019 effective date.<sup>37</sup>

## **II. Notice and Responsive Pleadings**

25. Notice of the PSCo's filing was published in the *Federal Register*, 83 Fed. Reg. 60,838 (2018), with interventions and protests due on or before December 10, 2018. On November 21, 2018, the Commission's Secretary issued an errata notice correcting and extending the comment due date to December 12, 2018.

26. Timely motions to intervene were filed by: Western Area Power Administration; Holy Cross Electric Association (Holy Cross); PacifiCorp; EDP Renewables North America LLC; the American Wind Energy Association; Portland General Electric Company; Avangrid Renewables, LLC; and Colorado Springs Utilities (Colorado Springs). EDF Renewables, Inc. and E.ON Climate & Renewables North America LLC (EDF/E.ON), Duke Energy Corporation (Duke Energy), Tradewind Energy, Inc. (Tradewind), Western Power Trading Forum (Western Power), 8minutenergy Renewables LLC (8minutenergy), Interwest Energy Alliance (Interwest), and NextEra

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<sup>35</sup> PSCo Transmittal Letter at 10-14.

<sup>36</sup> *Id.* at 24.

<sup>37</sup> *Id.* at 2, 6.

Energy Resources, LLC (NextEra) filed timely motions to intervene and comments. PSCo, Holy Cross, and Colorado Springs filed answers.

27. NextEra, Duke Energy, 8minutenergy, and Colorado Springs support PSCo's efforts to reform its interconnection process. NextEra states that PSCo's proposed first-ready, first-served Reform Proposal is superior to the *pro forma* LGIP by eliminating the incentive for premature projects to enter the queue and for developers to game the queue as some are doing now.<sup>38</sup> Duke Energy states that the serial nature of PSCo's current LGIP has led to significant delays in the interconnection process and avers that the proposed clustering process will allow projects requiring costly network upgrades to explore a more viable path towards interconnection.<sup>39</sup> According to 8minutenergy, PSCo conducted an extensive stakeholder process, was responsive to stakeholder input, and incorporated meaningful revisions to its initial proposal at the suggestion of stakeholders.<sup>40</sup> Colorado Springs states that PSCo's proposal offers a practical solution to addressing problems that are affecting PSCo's current interconnection process.<sup>41</sup>

### **III. Discussion**

#### **A. Procedural Matters**

28. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2018), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

29. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to a protest or answer unless otherwise ordered by the decisional authority. We accept the answers filed by PSCo, Holy Cross, and Colorado Springs because they have provided information that assisted us in our decision-making process.

#### **B. Commission Determination**

30. PSCo has a large backlog of over 23,000 MW of generation interconnection requests pending in its LGIP interconnection queue. PSCo has demonstrated a need to address this issue, and we appreciate the extensive effort of PSCo and its stakeholders to

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<sup>38</sup> NextEra Comments at 6.

<sup>39</sup> Duke Energy Comments at 2-3.

<sup>40</sup> 8minutenergy Comments at 2-3.

<sup>41</sup> Colorado Springs Comments at 1.

develop the proposed revisions to the PSCo LGIP and LGIA. However, we find that PSCo's filing is inadequate in several respects. Although we reject the filing without prejudice, this order also provides guidance to assist PSCo in alleviating concerns and refiling a modified proposal if it decides to do so, and we encourage PSCo to do so.

31. Specifically, as discussed more fully below, we find that (1) PSCo's revised tariff language regarding cost allocation of network upgrades is not sufficiently clear; (2) PSCo has not demonstrated that its financial milestone proposal is consistent with or superior to the *pro forma* LGIP; (3) PSCo has not demonstrated that its proposed Site Control requirements provisions are consistent with or superior to the *pro forma* LGIP; (4) PSCo's proposed termination provision in Article 2.3.1 includes a misplaced reference; (5) PSCo has not demonstrated how its suspension provision is consistent with or superior to the *pro forma* LGIA; (6) PSCo's proposed revision to Article 5.2(3) of the LGIA is inconsistent with the Commission's findings in both Order No. 2003 and Order No. 845; (7) PSCo has not sufficiently supported why a customer under a Provisional LGIA should be denied the same suspension rights as customers constructing facilities under a standard LGIA; and (8) PSCo has failed to demonstrate that its proposed process for utilizing and transferring Surplus Interconnection Service is consistent with or superior to Order No. 845. Until these inadequacies are remedied, we cannot find that PSCo's Reform Proposal has been shown to be consistent with or superior to the *pro forma* LGIA and LGIP. Accordingly, we reject PSCo's proposed tariff revisions, without prejudice to PSCo submitting a revised proposal in the future, and we provide further guidance.

### **C. Substantive Issues**

#### **1. Study Deposits and Cost Allocation**

##### **a. Filing**

32. PSCo's LGIP currently requires an interconnection customer to provide (1) a \$10,000 deposit with its interconnection request for the feasibility study, (2) a \$50,000 deposit for the system impact study, and (3) a \$100,000 deposit for the facilities study. PSCo proposes to change the study deposits that interconnection customers must make. Specifically, PSCo proposes that an interconnection customer must make the following study deposits prior to entering the interconnection queue and that will count toward the full Definitive Interconnection Study Process: a deposit of \$75,000 for requests between 20 MW and 50 MW; \$150,000 for requests of 50 MW and greater, but less than 200 MW; and \$250,000 for requests of 200 MW and greater.<sup>42</sup>

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<sup>42</sup> PSCo Transmittal Letter at 30-31 n.144.

33. PSCo states that it will apply the study deposit to the interconnection customer's share of the Definitive Interconnection Study Process costs. For the clustered DISIS portion of the Definitive Interconnection Study Process, PSCo states that study costs will be allocated to cluster study participants as follows: 50 percent based on the number of interconnection requests in the cluster; and 50 percent based on the requested megawatts in the cluster.<sup>43</sup> PSCo will continue to pay or refund any difference between the actual cost of the study and the study deposit without interest to the interconnection customer.<sup>44</sup>

34. PSCo also proposes to charge a penalty of twice the study cost to an interconnection customer that withdraws from the queue at any phase of the Definitive Interconnection Study Process. For example, if the study cost allocated to a specific customer at the time of its withdrawal is \$5,000, then that withdrawing customer will be charged a total of \$10,000.<sup>45</sup>

35. PSCo states that costs for "network upgrades required for direct interconnection" will be allocated based on the number of generating facilities interconnecting at a specific location on a per interconnection request basis (regardless of size); and costs for all other network upgrades will be allocated to the specific interconnection customer according to the proportional impact of the specific request on that network upgrade.<sup>46</sup> PSCo explains that this cost allocation proposal separates out the facilities required to directly interconnect the generators such as new substations or additional breakers and meters in a substation from "other network upgrades."<sup>47</sup> PSCo further states that the costs of shared transmission provider's interconnection facilities will be allocated based on the number of interconnection requests for a specific location, and the costs of transmission provider's interconnection facilities that serve only one interconnection customer will be directly assigned to that interconnection customer. PSCo also notes that the costs of

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<sup>43</sup> *Id.* at 31.

<sup>44</sup> PSCo proposes to no longer allow excess study deposit amounts to be offset against the cost of any future interconnection studies. Revised LGIP § 12.3.

<sup>45</sup> PSCo Exhibit XES-200 at 42.

<sup>46</sup> Revised LGIP § 4.2.4. PSCo notes that while it will use the proposed cost allocations to determine readiness milestones and funding obligations, PSCo's transmission customers, not its interconnection customers, are ultimately responsible for the cost of network upgrades.

<sup>47</sup> PSCo Exhibit XES-200 at 43.

upgrades needed for the Resource Solicitation Process will not be allocated to customers that are interconnecting outside of the Resource Solicitation Cluster.

**b. Commission Determination**

36. We find that PSCo has not demonstrated that its proposed cost allocation provisions are consistent with or superior to the *pro forma* LGIP and therefore reject them. We find that it is not clear how PSCo proposes to allocate the costs of network upgrades to interconnection customers.<sup>48</sup> PSCo's Revised LGIP describes two separate methods of allocating the costs of network upgrades—one that will apply to “network upgrades required for direct interconnection” and one that will apply to all other network upgrades. However, the revised tariff language is not sufficiently clear as to what each category of network upgrades includes (i.e., what “network upgrades [are] required for direct interconnection” versus other network upgrades). Further, PSCo's proposed tariff language does not clearly explain how it will measure “proportional impact” of an interconnection customer on a network upgrade. Therefore, to the extent PSCo proposes in a future filing to revise its interconnection procedures, PSCo should clearly explain in the tariff language what each category of network upgrades includes, and how it plans to measure proportional impact of an interconnection customer's request on a particular network upgrade.

**2. Readiness Milestones and Resource Solicitation Clusters**

**a. Filing**

37. PSCo states that it has developed a series of readiness milestones with the goal of allowing all viable projects to move through the queue, while also providing developers with the flexibility to demonstrate their readiness in a variety of ways. To that end, PSCo proposes Milestones 1 through 5 and offers both financial security and non-financial milestone options for all Milestones except, Milestone 5, which has only a financial milestone.<sup>49</sup> PSCo states that the purpose of the readiness milestones is to require an interconnection customer to demonstrate that a specific project is ready to move forward

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<sup>48</sup> Consistent with Order No. 2003, PSCo provides transmission credits as reimbursement to interconnection customers that fund needed network upgrades. Order No. 2003, 104 FERC ¶ 61,103 at PP 28-29, 696. PSCo is not proposing revisions to its crediting policy.

<sup>49</sup> PSCo notes that the financial security for Milestone 5 is required after tender of the final LGIA. PSCo Transmittal Letter at 41.

with interconnection, reducing the likelihood of the customer withdrawing from the queue and thereby harming other interconnection customers.<sup>50</sup>

38. As proposed, the financial security option requires an interconnection customer to post an amount of at-risk security in the form of an irrevocable letter of credit or cash that PSCo states is significant enough to encourage developers to pursue near-ready projects. PSCo states that the amount of financial security required increases as the project progresses through the study phases. PSCo states that to enter Phase 1, financial security of \$2,000/MW is required for Milestone 1. PSCo explains financial security for the remaining milestones (Milestones 2 through 5) is calculated based on the cost of the transmission provider's interconnection facilities and network upgrades needed to actually interconnect the facility, per the most recent report for each phase.<sup>51</sup> PSCo notes that the percentages represent the total financial security required to satisfy a readiness milestone and are not additive. PSCo states that the financial security option demonstrates readiness and is not a payment for transmission upgrades.<sup>52</sup>

39. PSCo states that the financial security becomes "at risk" when the next readiness milestone is satisfied. For example, if an interconnection customer withdraws after posting Milestone 3, then it will forfeit the amount of financial security required at Milestone 2.<sup>53</sup> PSCo proposes to fully refund milestone payments under two limited circumstances: (1) if the withdrawal does not negatively affect equal- or lower-queued projects; or (2) if the cost of the upgrades assigned to the interconnection customer increase by more than 25 percent compared to the costs identified in the previous phase report, or if the costs increase at no fault of the customer by more than 100 percent compared to the costs identified in the Phase 2 report. PSCo states that in all other instances, the financial security is at-risk and will not be returned to the interconnection customer. PSCo proposes to use any financial security forfeited due to an interconnection customer's withdrawal for the construction of network upgrades to generally benefit remaining customers in the DISIS Cluster. To the extent there is excess

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<sup>50</sup> *Id.* at 40-41.

<sup>51</sup> PSCo's proposed financial security for Milestone 2 is equal to 10 percent of the cost of facilities required to interconnect that are identified in the Phase 1 study report. Thereafter, the financial security milestones increase with each study phase, and are as follows: Milestone 3 equals 20 percent; Milestone 4 equals 30 percent; and Milestone 5 equals 40 percent.

<sup>52</sup> *Id.* at 42-43.

<sup>53</sup> The \$2,000/MW Milestone 1 requirement is fully refundable if the interconnection customer withdraws prior to committing to Phase 2.

forfeited financial security, PSCo states that the remaining amount will be used to fund network upgrades for subsequent clusters.<sup>54</sup>

40. PSCo proposes the following non-financial milestones: (1) contract for sale; (2) inclusion in a Resource Plan; and (3) Provisional Interconnection Service. Under the contract for sale option, the interconnection customer must provide an executed term sheet to satisfy Milestones 1 and 2, and an executed contract to satisfy Milestones 3 and 4. The term sheet or contract may be for the sale of the constructed generating facility; the generating facility's energy; or the generating facility's ancillary services and capacity if the generating facility is a storage resource. Under the Resource Solicitation Process option, the interconnection customer must demonstrate that it has been included in a Resource Solicitation Process to satisfy Milestones 1 and 2, and that it has been selected in a Resource Solicitation Process that has been approved by the appropriate regulatory body to satisfy Milestones 3 and 4.<sup>55</sup> Finally, under the Provisional Interconnection Service option, the interconnection customer must demonstrate that it has filed a Provisional LGIA with the Commission to satisfy Milestones 1 and 2, and that the facilities have commenced construction to satisfy Milestones 3 and 4.<sup>56</sup>

41. PSCo notes that it considered a mandatory financial milestone, without the non-financial options. However, PSCo states that, in its experience, generators with contracts or generators that have been approved in a Resource Solicitation Process are ready projects that do not withdraw from the queue. Further, customers that demonstrate readiness by executing a Provisional LGIA must comply with substantial at-risk security requirements as part of that contract. PSCo also notes that, under the Reform Proposal, a withdrawing interconnection customer will be subject to a financial penalty of twice the study costs allocated to the specific customer at the time of its withdrawal. PSCo states that, nevertheless, if the Commission believes that requiring both financial security and one non-financial milestone to demonstrate readiness would be a better approach, PSCo would accept such a requirement.<sup>57</sup>

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<sup>54</sup> *Id.* at 44-47.

<sup>55</sup> An interconnection customer that is in a Resource Solicitation Cluster may use the Resource Solicitation Process option to satisfy the milestone requirement for both the Resource Solicitation Cluster and, if applicable, the DISIS Cluster.

<sup>56</sup> *Id.* at 47-49.

<sup>57</sup> *Id.* at 40-42.

**b. Comments**

42. Western Power states that it generally opposes the use of non-financial milestones.<sup>58</sup> Western Power argues that the three non-financial milestone options are difficult to achieve, as most customers will not be able to secure a power sales contract or be selected in a resource solicitation without interconnection study results. Western Power also argues that the Provisional Interconnection Service option will be unattractive because it will likely require the customer to be willing to pay for all required facilities, regardless of cost. Therefore, according to Western Power, these alternative milestones appear to offer the ability for preferential treatment of certain resources by the transmission provider because the only way to achieve them will be for the transmission provider to not require any interconnection study results, as PSCo did in its last resource solicitation, and will be difficult for independent power producers to achieve. Western Power states that PSCo should instead require the same financial requirements for all interconnection customers.<sup>59</sup>

43. EDF/E.ON protest the use of financial milestones, stating that such milestones are only appropriate when there is an open, organized market with many choices to sell power. They explain that it is unrealistic to put an organized market concept into a resource planning entity-dominated structure. According to EDF/E.ON, only those interconnection customers with a power purchase agreement with a resource planning entity will remain in the queue, and, therefore, the financial milestones are not just and reasonable.<sup>60</sup> EDF/E.ON also protest the non-refundable nature of the financial milestones if a project withdraws, because it is not clear that PSCo will use the forfeited money to offset the cost of network upgrades. They further argue that, at a minimum, Milestone 5 should be refundable. They explain that Milestone 5 is similar to the initial payment in the Midcontinent Independent System Operator, Inc. (MISO), and once the LGIA is executed in MISO, the milestones and initial payment are refundable.<sup>61</sup>

44. EDF/E.ON argue that under the Reform Proposal, interconnection customers in a Resource Solicitation Cluster are not required to provide Milestones 1 and 2, and can withdraw after Phase 2 without any risk or financial ramification. EDF/E.ON further

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<sup>58</sup> Western Power also opposes PSCo's offer to require both financial security and one non-financial milestone.

<sup>59</sup> Western Power Comments at 4-6.

<sup>60</sup> EDF/E.ON Comments at 1-3.

<sup>61</sup> *Id.* at 10-12 (citing *Midcontinent Indep. Sys. Operator, Inc.*, 161 FERC ¶ 61,137, at P 29 (2017)).

argue that once a project is selected in a Resource Solicitation Cluster, it is not required to provide Milestones 3-5 either. EDF/E.ON contend that this is discriminatory and preferential because interconnection customers in both cluster types are similarly situated.<sup>62</sup> EDF/E.ON state that these disparities will result in negative effects on competition and only the Resource Solicitation Clusters flourishing.<sup>63</sup>

45. Western Power and EDF/E.ON express concern for a scenario in which a customer demonstrating readiness through a non-financial milestone (with no financial security at risk) withdraws from the queue and negatively affects remaining customers in the queue.<sup>64</sup> EDF/E.ON contend that the Commission approved the financial milestone aspect of MISO's queue reform because the funds protect lower-queued customers or projects that remain in the queue from cost shifts, and such a concept is not included here. EDF/E.ON state that it is similarly problematic for forfeited security from a withdrawing customer in a DISIS Cluster to offset the network upgrade costs of customers in a Resource Solicitation Cluster.<sup>65</sup>

46. EDF/E.ON protest the opportunity for a project to simultaneously be in both a Resource Solicitation Cluster and a DISIS Cluster. They contend that, if the project withdraws from the DISIS Cluster, there will be an immediate, unexpected cost shift to the other customers in the DISIS Cluster. EDF/E.ON also state that PSCo is silent as to how the timing of the Resource Solicitation Clusters will impact the DISIS Clusters, and that there are no tariff provisions requiring that the Resource Solicitation Clusters be completed in a timely fashion.<sup>66</sup>

47. According to 8minutenergy, the non-financial milestone options provide important flexibility for developers, and the ultimate success of their projects.<sup>67</sup> With regard to PSCo's proposal to include Resource Solicitation Clusters in the Reform Proposal, 8minutenergy supports that proposal stating that it provides interconnection customers

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<sup>62</sup> *Id.* at 4-5.

<sup>63</sup> *Id.* at 9.

<sup>64</sup> Western Power Comments at 7-8.

<sup>65</sup> EDF/E.ON Comments at 6-7.

<sup>66</sup> *Id.* at 7-8.

<sup>67</sup> 8minutenergy Comments at 3-4.

the appropriate flexibility in project schedule to meet solicitation timelines.<sup>68</sup>

48. Western Power seeks clarification from PSCo that resources selected in a Resource Solicitation Process outside of the PSCo transmission system would be eligible to qualify for the Resource Solicitation Process option.<sup>69</sup>

**c. Answers**

49. In its answer, PSCo states that its milestone options represent an attempt to provide customers with flexibility in demonstrating readiness. It explains that during the stakeholder process, some independent power producers argued that a financial milestone option was important to their business model. In contrast, PSCo states, requiring all customers to make financial milestone payments would prevent some developers with limited resources from operating in the PSCo region. PSCo notes that the Provisional Interconnection Service option provides similar flexibility as the financial security option, but because the Provisional Interconnection Service concept is new to PSCo and its stakeholders, PSCo finds it necessary to keep the financial security option. In response to Western Power's comment, PSCo states that all interconnection projects with transmission facility upgrade cost responsibility are required to post financial security — Milestone 5 requires all customers to post financial security equal to 40 percent of their projects' assigned costs.<sup>70</sup>

50. PSCo argues that EDF/E.ON's request to make Milestone 5 (together with all earlier milestone payments) refundable is inappropriate because such design would encourage non-viable projects to stay in the queue until they satisfy Milestone 5 and then drop out.<sup>71</sup>

51. In response to EDF/E.ON, PSCo states that merely bidding into a resource solicitation, or being considered for inclusion in a Resource Solicitation Process, is insufficient to meet the Milestone 1 and 2 Resource Solicitation Process option requirement. PSCo argues that pursuant to the proposed tariff language, the project must have been *selected* in a Resource Solicitation Process. PSCo suggests that a project that

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<sup>68</sup> *Id.* at 4-5.

<sup>69</sup> Western Power also requests that PSCo make a clarifying edit to Revised LGIP § 7.7 regarding the use of the terms "Resource Plan" and "Resource Solicitation Process." Western Power Comments at 10-11.

<sup>70</sup> PSCo Answer at 3-6.

<sup>71</sup> *Id.* at 7-8.

has bid into a Resource Solicitation Process, but has not yet been selected, might satisfy Milestones 1 and 2 with a financial deposit.<sup>72</sup>

52. In response to the concern that the Resource Solicitation Cluster will cause cost shifts to DISIS Cluster projects, PSCo states that projects in the Resource Solicitation Cluster may elect to use either the financial or non-financial milestone options. Regardless of which cluster type a project is in, if it has posted financial security and withdraws, any associated harm to projects in the same cluster would be mitigated to a limited extent.<sup>73</sup>

53. In response to Western Power's requests for clarification, PSCo states that it is PSCo's intent that resource solicitations outside of the PSCo balancing authority area would qualify under the Resource Solicitation Process option. PSCo states that it will make a clarifying edit to the definition of Resource Solicitation Process in the Revised LGIP.<sup>74</sup>

54. Holy Cross filed an answer stating that the Resource Solicitation Cluster option is an important way for load-serving entities, including Holy Cross, to efficiently evaluate the interconnection costs associated with generation options. Holy Cross argues that PSCo has maintained the same safeguards present in its current LGIP and therefore the Resource Solicitation Cluster option is not unduly discriminatory.<sup>75</sup>

**d. Commission Determination**

55. We find that PSCo has not demonstrated that its proposed readiness milestone provisions are consistent with or superior to the *pro forma* LGIP and, therefore, reject them. We find that PSCo has not clearly explained what will happen to the financial milestone payments upon execution of an LGIA (i.e., if the customer does not withdraw). PSCo states that "the financial security option demonstrates readiness, and is not, for example, a payment for transmission upgrades" and that the milestone payments are non-refundable.<sup>76</sup> Based on the information PSCo provided, it appears that these financial milestone payments upon execution of an LGIA where an interconnection customer does

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<sup>72</sup> *Id.* at 12-14 (citing Revised LGIP §§ 7.7.2, 7.7.3).

<sup>73</sup> *Id.* at 15-16.

<sup>74</sup> PSCo also commits to make the clarifying edit regarding Revised LGIP § 7.7 that Western Power requested. *Id.* at 8-9.

<sup>75</sup> Holy Cross Answer at 3-5.

<sup>76</sup> PSCo Transmittal Letter at 42.

not withdraw) will go to PSCo. This is not appropriate. To the extent that PSCo proposes in a future filing to revise its interconnection procedures, it is not appropriate for forfeited financial security to be non-refundable in the event that an interconnection customer withdraws from the queue. Furthermore, PSCo has not demonstrated how this proposal is consistent with or superior to the *pro forma* LGIP because PSCo has not made clear whether, for example, the milestone payments are refunded to the interconnection customer or applied toward future network upgrade costs. Therefore, to the extent PSCo proposes in a future filing to revise its interconnection procedures, it should explain what will happen to the financial milestone payments upon execution of an LGIA, and how such proposal is consistent with or superior to the *pro forma* LGIP.

### 3. Site Control

#### a. Filing

56. PSCo proposes to utilize the concept of Site Control as an additional demonstration of readiness. PSCo's current tariff requires a demonstration of Site Control to initiate an interconnection request, or in the alternative, a customer can provide a deposit of \$10,000 in lieu of Site Control, which is consistent with the *pro forma* LGIP. PSCo proposes to modify the definition of Site Control from the *pro forma* LGIP definition and, along with the proposed readiness milestones, will require demonstrations of Site Control that gradually increase at each milestone.<sup>77</sup>

57. PSCo states its proposed modifications to the *pro forma* definition of Site Control will provide more transparency to interconnection customers and ensure that Site Control is a meaningful indication of readiness. The modified definition includes that Site Control must be of sufficient size to construct and operate a generating facility, and that Site Control of the generating facility must be exclusive.<sup>78</sup> PSCo explains that the clarification that Site Control must be exclusive will protect against multiple projects assuming the same site for developing their facilities, and therefore double counting Site Control.<sup>79</sup> PSCo states that its proposed definition of Site Control is consistent with Commission precedent and is consistent with or superior to the Order 2003 *pro forma* LGIP.<sup>80</sup>

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<sup>77</sup> PSCo Transmittal Letter at 50.

<sup>78</sup> PSCo states that it will post the acres per MW requirement for different generation types in a business practice manual on OASIS for additional clarity.

<sup>79</sup> *Id.* at 50-51.

<sup>80</sup> *Id.* (citing *Pub. Serv. Co. of N.M.*, 136 FERC ¶ 61,231, at P 81 (2011) (PNM

58. Regarding the use of Site Control as a demonstration of readiness, PSCo proposes to require increased Site Control through the phases of the Definitive Interconnection Study Process. Specifically, PSCo proposes to require at least 50 percent site control of the generating facility before entering the Definitive Interconnection Study Process, with increasing percentages at each phase, and at least 90 percent at LGIA execution. PSCo states that it is requiring only 50 percent of the interconnection customer's interconnection facilities to be under Site Control at the time the LGIA is executed. PSCo also proposes to remove the option to provide a \$10,000 deposit in lieu of a demonstration of Site Control. PSCo states that it is not allowing additional financial security or other deposit in lieu of Site Control, as ready projects should have a firm knowledge of where they are locating and should be acquiring Site Control ahead of or in parallel with the Definitive Interconnection Study Process.<sup>81</sup>

**b. Comments**

59. Western Power protests the requirement for 50 percent exclusive site control of interconnection customer's interconnection facilities by LGIA execution, stating that the requirement is overly restrictive. Western Power also argues that the exclusivity requirement for interconnection customer's interconnection facilities is unnecessarily prohibitive and would serve to prevent multiple entities from sharing interconnection customer's interconnection facilities (e.g. gen-tie lines). According to Western Power, the sharing of generator tie lines is common practice and it is unclear why PSCo would prevent multiple entities from sharing interconnection customer's interconnection facilities by requiring exclusive site control for these facilities.<sup>82</sup>

**c. Answer**

60. In its answer, PSCo states that it believes it is appropriate to require the demonstration of some level of site control for interconnection customer's interconnection facilities, since a failure to secure such site control can prevent a project from reaching commercial operation, and because PSCo has experienced large numbers of interconnection requests seeking to interconnect at the same substation locations. However, PSCo notes that its proposed definition of Site Control does not require site

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LGIP Reform Order)). In the PNM LGIP Reform Order, the Commission accepted revisions to transition Public Service Company of New Mexico's (PNM) interconnection procedures from a first-come, first-served serial approach to a first-ready, first-served cluster approach in order to address a backlog of large generator interconnection requests.

<sup>81</sup> *Id.*

<sup>82</sup> Western Power Comments at 8-9.

control for interconnection customer's interconnection facilities to be exclusive. PSCo further explains that the exclusive requirement only applies to site control for the generating facility. Thus, PSCo states, its Reform Proposal does not prevent multiple interconnection customers from sharing the land rights needed for an interconnection customer's interconnection facilities, or from sharing an interconnection customer's interconnection facilities itself.<sup>83</sup>

**d. Commission Determination**

61. We find that PSCo has not demonstrated that its proposed Site Control requirements provisions are consistent with or superior to the *pro forma* LGIP and therefore reject them. Specifically, PSCo's proposal does not allow interconnection customers to provide an alternative deposit or demonstration in lieu of the Site Control requirements as established by Order No. 2003.<sup>84</sup> In the PNM LGIP Reform Order, the Commission accepted PNM's proposal to remove the option to provide a \$10,000 deposit in lieu of Site Control.<sup>85</sup> However, PNM's OATT includes an option for a customer to propose an alternative demonstration of Site Control.<sup>86</sup> To the extent PSCo proposes in a future filing to revise its interconnection procedures, PSCo should propose an alternative demonstration of Site Control.

62. We also find that the revised Site Control definition is overly restrictive because of the requirement for an interconnection customer to demonstrate exclusive land rights for a generating facility as defined in PSCo's *pro forma* LGIA. Specifically, the exclusive land rights requirement appears to exclude the possibility of co-located projects, such as solar generation and energy storage. The *pro forma* LGIP and LGIA do not require exclusive site control.<sup>87</sup> Therefore, we find that PSCo has failed to demonstrate that its proposed Site Control definition is consistent with or superior to the *pro forma* LGIP definition. To the extent PSCo proposes in a future filing to revise its interconnection procedures, PSCo should provide more clarity as to how its proposed definition does not prevent interconnection customers that are co-located from being able to demonstrate Site Control.

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<sup>83</sup> PSCo Answer at 18-20.

<sup>84</sup> Order No. 2003, 104 FERC ¶ 61,103 at P 100.

<sup>85</sup> PNM LGIP Reform Order, 136 FERC ¶ 61,231 at PP 23, 81.

<sup>86</sup> See PNM OATT, LGIP, §3.3.1(iii).

<sup>87</sup> *Pro forma* LGIP §3.3.1

#### **4. LGIA Termination Procedures**

##### **a. Filing**

63. PSCo proposes to revise the termination provision in Article 2.3.1 of the LGIA to state that if a generating facility does not reach Commercial Operation, then the Transmission Provider may terminate the LGIA. PSCo cites to Commission precedent in MISO in support of its revisions.<sup>88</sup>

##### **b. Commission Determination**

64. We reject PSCo's proposed termination provision in Article 2.3.1 of the Revised LGIA. We note that this provision seems very close to the termination provision in Article 2.3.1 of the MISO *pro forma* LGIA. However, in the MISO LGIA, references to section 4.4.4 of the MISO LGIP clarify the process under which an interconnection customer can extend its commercial operation date. In PSCo's proposed Revised LGIP, section 4.4.4 is substantively different from section 4.4.4 of MISO's LGIP. Therefore, we find the references to Revised LGIP section 4.4.4 in PSCo's proposed LGIA Article 2.3.1 to be misplaced and unclear. To the extent PSCo proposes in a future filing to revise its interconnection agreement, PSCo should remove the misplaced reference.

#### **5. Suspension**

##### **a. Filing**

65. Consistent with the *pro forma* LGIA, PSCo's proposal allows interconnection customers to elect to suspend work on the transmission provider's interconnection facilities, distribution upgrades, and/or network upgrades identified in the LGIA for any reason, for up to three years. However, PSCo proposes to add the condition that if an equal or lower-queued project relies on such facilities, the suspending interconnection customer must fully fund those facilities up front so that they are constructed according to the schedule required by the LGIA appendices, or at least with a schedule sufficient to meet the lower-queued customer's needs. The interconnection customer may request a

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<sup>88</sup> PSCo Transmittal Letter at 52-53 (citing *Midcontinent Indep. Sys. Operator, Inc.*, 163 FERC ¶ 61,210, at P 36 (2018); *Midwest Indep. Transmission Sys. Operator, Inc.*, 139 FERC ¶ 61,253, at PP 115, 120-23 (2012); *Midwest Indep. Transmission Sys. Operator, Inc.*, 137 FERC ¶ 61,188, at P 29 (2011), *order on compliance filing*, 139 FERC ¶ 61,197, at P 8 (2012)).

restudy to evaluate the need for such facilities, but its project will remain in all study models until it cancels its LGIA.<sup>89</sup>

66. According to PSCo, it is reasonable to require an interconnection customer to fund upgrades that other customers rely upon for four reasons. First, other interconnection customers, including those in the same cluster, moved forward with interconnection on the assumption that such upgrades would be constructed. Second, other interconnection customers assume that the suspending interconnection customer will pay its share of the upgrade cost, otherwise non-suspending customers will be responsible for the difference. Third, the failure to construct the upgrade could delay other interconnection customers' commercial operation date and result in lost revenue to them. Fourth, the failure to construct the upgrade could require a restudy of all equal- and or lower-queued projects, thereby causing cascading delays in the study process and harming other interconnection customers in the region.<sup>90</sup>

67. PSCo proposes to allow full repayment to an interconnection customer that has fully funded transmission provider's interconnection facilities, distribution upgrades, and/or network upgrades that are constructed, if (1) the interconnection customer fails to achieve commercial operation, but (2) it or another generating facility is constructed within four years of the failure and makes use of the portion of the facilities that were reserved for the original project.<sup>91</sup> PSCo states that this proposal is similar to the language in Article 11.4.1 of the *pro forma* LGIA, which states that if the project fails to reach commercial operation but another generating project is later constructed and makes use of the network upgrades, the interconnection customer will be reimbursed for any amounts advanced for network upgrades. Finally, PSCo states that the proposed changes also clarify the effect of missing LGIA milestones. PSCo explains that this modification is meant to ensure that a loophole is not created, i.e., that an interconnection customer could avoid paying for an upgrade as required by an LGIA milestone by entering suspension. PSCo argues that these changes are reasonable because they preserve flexibility for developers while providing certainty for equal- and later-queued customers, as well as for PSCo.<sup>92</sup>

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<sup>89</sup> PSCo Transmittal Letter at 54.

<sup>90</sup> *Id.*

<sup>91</sup> The suspending interconnection customer would be refunded for the costs of the network upgrades in accordance with the normal transmission crediting policy.

<sup>92</sup> *Id.* at 54-55. PSCo states that the proposed modification language is consistent with language used in other regions (citing MISO FERC Electric Tariff, Attach. X:

**b. Comments**

68. EDF/E.ON argue that the suspension provision is an unjust and unreasonable departure from the *pro forma* terms and conditions because it assigns costs to fund network upgrades to suspending parties if other customers are relying on those upgrades. They aver that in Order No. 2003, the Commission was mindful of the impacts of suspension on lower-queued customers, but did not require suspending customers to provide any funding for network upgrades. They also argue that PSCo's proposal would make suspension superfluous, and that PSCo has not demonstrated unique harm to show why this change would be just and reasonable. Finally, they take issue with PSCo's proposal to potentially restudy a project once it comes out of suspension.<sup>93</sup>

**c. Answer**

69. PSCo, in its answer, states that requiring higher-queued suspended projects to fund upgrades relied on by lower-queued projects is an important component of its queue reform because it will allow equal and lower-queued projects to move forward. It represents that this is especially important where other cluster participants rely on the same facilities to interconnect. PSCo notes that the majority of its stakeholders supported these revisions and that they were developed as part of a package of reforms, per the Commission's guidance in the May 2018 Order. It further notes that its proposal is less strict than what the Commission approved in *MISO* as part of a comprehensive interconnection queue reform package.<sup>94</sup>

**d. Commission Determination**

70. While we appreciate that PSCo developed its proposed suspension provisions as part of a comprehensive queue reform effort that involved a stakeholder process, PSCo has not demonstrated how its suspension provision is consistent with or superior to the *pro forma* LGIA, and therefore we reject it. Order No. 2003 allowed interconnection customers to suspend their projects for up to three years.<sup>95</sup> The Commission determined

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App. 6 (Generation Interconnection Agreement), Article 5.16.2).

<sup>93</sup> EDF/E.ON Comments at 12-13.

<sup>94</sup> PSCo Answer at 20-21.

<sup>95</sup> The Suspension provision is provided in section 5.16 of the *pro forma* LGIA, and states, in part:

Interconnection Customer reserves the right, upon written notice to Transmission Provider, to suspend at any time all work by Transmission

that a three-year suspension gave “generation projects the flexibility necessary to accommodate permitting and other delays that are particularly likely to affect large projects.”<sup>96</sup>

71. The Commission was aware, though, that suspension could lead to costs shifting to lower-queued customers and noted concerns that a lower-queued “Interconnection Customer may be responsible for funding the costs of completing the Network Upgrades constructed for a higher-queued Interconnection Customer....”<sup>97</sup> Nevertheless, section 5.16 of the *pro forma* LGIA specifically limits the costs that the suspending interconnection customer will be responsible for to only “costs which Transmission Provider (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work.”<sup>98</sup> There is no other category of costs for which the suspending interconnection customer is responsible under the *pro forma* LGIA.

72. On rehearing of Order No. 2003, the Commission heard similar comments, and addressed the cost shifting issue directly. It found that an interconnection customer should be responsible for: “Network Upgrades that originally were the responsibility of a higher queued Interconnection Customer that then dropped out of the queue, if these

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Provider associated with the construction and installation of Transmission Provider's Interconnection Facilities and/or Network Upgrades required under this LGIA with the condition that the Transmission Provider shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Transmission Provider's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Transmission Provider (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Transmission Provider cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Provider shall obtain Interconnection Customer's authorization to do so.

<sup>96</sup> Order No. 2003, 104 FERC ¶ 61,103 at P 410.

<sup>97</sup> *Id.* P 409.

<sup>98</sup> *Id.*, Appendix C, Standard Large Generator Interconnection Procedures including Standard Large Generator Interconnection Agreement, at section 5.16.

Network Upgrades are necessary to support the interconnection of the Interconnection Customer's Generating Facility.”<sup>99</sup> The Commission acknowledged the consequences this provision would have on lower-queued customers and concluded that such consequences were business risks.<sup>100</sup> Therefore, we find that PSCo's proposal is not consistent with or superior to the *pro forma* LGIA because it assigns costs to a suspending interconnection customer other than those costs specifically permitted in Order No. 2003. We note, however, that the Commission has accepted similar provisions to PSCo's proposal in MISO and PJM. In granting MISO's and PJM's requests, the Commission relied on the independent entity variation standard, which allows RTOs/ISOs additional flexibility in proposing variations from the *pro forma* LGIP/LGIA. The independent entity variation does not apply to PSCo.<sup>101</sup>

## 6. Option to Build

### a. Filing

73. In its filing, PSCo proposes to revise Article 5.2(3) of the LGIA. PSCo explains that while reviewing this portion of the LGIA related to the interconnection customer's option to build the transmission provider's interconnection facilities and standalone network upgrades, PSCo engineers became concerned with liability regarding the design of those facilities. PSCo explains that it believes the use of “approve” when referring to the facilities' design implies that PSCo would take on liability for another company's design. Therefore, PSCo revises Article 5.2(3) to “accept” rather than “approve.” PSCo further notes that “Although PSCo does not believe it is reasonable to require the Transmission Provider's engineers to take on such liability when the Interconnection Customer exercises this option, we leave action on this amendment to the discretion of the Commission and the Commission's intent in Order No. 2003 and Order No. 845.”<sup>102</sup>

### b. Commission Determination

74. We reject PSCo's proposed revision to Article 5.2(3) of the LGIA. In the Order No. 845 proceeding, numerous commenters cited concerns related to liability and

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<sup>99</sup> Order No. 2003-A, 106 FERC ¶ 61,220 at P 320.

<sup>100</sup> *Id.*

<sup>101</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 124 FERC ¶ 61,183, at P 109 (2008) (*MISO*); *PJM Interconnection, L.L.C.*, 139 FERC ¶ 61,079, at P 65 (2012).

<sup>102</sup> PSCo Transmittal Letter at 53 and n.195.

indemnification regarding the interconnection customer's option to build.<sup>103</sup> The Commission considered these comments and found that changes to the requirements in Article 5.2 as established in Order No. 2003 are not necessary.<sup>104</sup> The Commission specifically noted that "article 5.2 already gives the transmission provider a significant role with regard to the option to build and provides sufficient safeguards to ensure reliable operations...."<sup>105</sup> Therefore, we reject PSCo's proposed revision as inconsistent with the Commission's findings in both Order No. 2003 and Order No. 845.

## 7. Order No. 845

### a. Filing

75. PSCo proposes the inclusion of Provisional Interconnection Service, including language that deviates from the revised Order No. 845 language in section 5.9.2 of the *pro forma* LGIA.<sup>106</sup> Specifically, PSCo has added language stating that Provisional Interconnection Service is only available to ready projects that demonstrate commitment to achieve interconnection and commercialization. Additionally, PSCo requires the interconnection customer to demonstrate continued progress towards its commercial operation date, and that failure to meet construction milestones in the Provisional Interconnection Agreement shall result in termination of the agreement. PSCo also added language to the definition of Provisional Large Generator Interconnection Agreement barring suspension of such agreement. PSCo states that Provisional Interconnection Service is one of the proposed readiness milestone options, and that it expects interconnection requests may take advantage of this proposal as part of the transitional process. Consequently, it avers that it is important that these provisions be accepted as part of the Reform Proposal.<sup>107</sup>

76. PSCo states that it incorporates four other policy initiatives from Order No. 845 verbatim: (1) non-binding dispute resolution process; (2) revision of the definition Generating Facility to explicitly include storage resources; (3) allowance of interconnection service that is lower than the Generating Facility capacity; and (4) creation of a process for interconnection customers to use surplus interconnection

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<sup>103</sup> Order No. 845, 163 FERC ¶ 61,043 at P 88.

<sup>104</sup> *Id.* PP 90-91.

<sup>105</sup> *Id.* P 91.

<sup>106</sup> PSCo Transmittal Letter at 55-57.

<sup>107</sup> *Id.* at 57-58.

service at existing points of interconnection. PSCo asserts that these changes are consistent with Order No. 845, and urges the Commission to approve the changes. PSCo states that it is proposing these changes now because it expects that such interconnection requests will be part of the transitional process or an early DISIS Cluster.<sup>108</sup> PSCo states that it will further modify its tariff for compliance with Order No. 845 once required to do so.<sup>109</sup>

**b. Comments**

77. Tradewind suggests a clarification to section 5.9.2. It believes that PSCo's proposed provisional language is more appropriate for inclusion in the LGIP. It argues that, because provisional service necessarily precedes execution of a final interconnection agreement, the language should instead appear in the LGIP, not in the LGIA.<sup>110</sup>

78. Interwest argues that PSCo's proposal to make Provisional Interconnection Service, any associated Agreement, and any associated upgrade ineligible for suspension violates a Commission-recognized right to suspension.<sup>111</sup> Because customers taking provisional service pay heightened security and cost-responsibility requirements, Interwest believes PSCo's proposal is unwarranted.<sup>112</sup>

**c. Answer**

79. In its answer, PSCo states that because an executed Provisional LGIA can be used as a readiness milestone, allowing suspension of Provisional LGIAs would weaken the value of this milestone. It adds that allowing Provisional LGIAs to suspend would run counter to the purpose of Provisional LGIAs, which are intended only for customers ready to operate immediately. It argues that a customer wishing to "suspend" a Provisional LGIA should instead simply terminate the Provisional LGIA and continue to work through the traditional LGIP. PSCo adds that it has now posted a template for

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<sup>108</sup> *Id.* at 58.

<sup>109</sup> *Id.* at 55.

<sup>110</sup> Tradewind Comments at 6-7.

<sup>111</sup> Interwest does not provide support for the existence of this right.

<sup>112</sup> Interwest Comments at 5-6.

Provisional LGIAs on its OASIS, and that it believes filing them as non-conforming LGIAs under section 205 as executed is the best approach.<sup>113</sup>

**d. Commission Determination**

80. We reject PSCo's proposed revisions implementing Provisional Interconnection Service and Surplus Interconnection Service. Order No. 845 maintains that any interconnection customer, regardless of queue position, may request Provisional Interconnection Service.<sup>114</sup> Therefore, we find PSCo's tariff revisions limiting Provisional Interconnection Service to "ready projects that demonstrate commitment to achieve interconnection and commercialization" do not comply with the requirements of Order No. 845. Further, we agree with Interwest that PSCo's proposal to prohibit suspension of a Provisional LGIA is inconsistent with the approach set forth in Order No. 845 and the standard LGIA. In Order No. 845, the Commission clarified that Provisional Interconnection Service is only available to interconnection customers awaiting the completion of the full interconnection process and will terminate upon completion of construction of interconnection facilities and network upgrades,<sup>115</sup> and the Commission did not bar construction under a Provisional LGIA from suspension. We find that PSCo has not sufficiently supported why a customer under a Provisional LGIA, which will have construction milestones similar to a standard LGIA, should be denied the same suspension rights as customers constructing facilities under a standard LGIA. With regard to Surplus Interconnection Service, we find that PSCo has failed to demonstrate that its tariff includes a process for utilizing and transferring Surplus Interconnection Service that is consistent with or superior to Order No. 845. To the extent PSCo proposes in a future filing to revise its interconnection procedures and include Surplus Interconnection Service in its interconnection reform proposal, PSCo should clearly address and support the criteria explained in Order No. 845.<sup>116</sup>

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<sup>113</sup> PSCo Answer at 21-23.

<sup>114</sup> Order No. 845, 163 FERC ¶ 61,043 at P 442.

<sup>115</sup> *Id.* at P 440.

<sup>116</sup> The Commission explained that:

[F]or a process to be consistent with or superior to, or an independent entity variation from the Final Rule's surplus interconnection service requirements, the transmission provider must demonstrate, at a minimum, that its tariff: (1) includes a definition of surplus interconnection service consistent with the Final Rule; (2) provides an expedited interconnection process outside of the interconnection queue for surplus interconnection service, consistent

## 8. Miscellaneous

### a. Comments

81. Interwest argues that the proposed DISIS process may benefit transmission customers that are most able to pay the higher costs of participating in the DISIS process, rather than maintaining an even playing field and more competitive pricing. To that end, Interwest suggests that PSCo post accurate current injection capacities at each substation every time it releases a request for proposal for new generation, rather than adopting a separate cluster system for preliminary projects.<sup>117</sup>

82. Western Power argues that PSCo's proposal to require both financial security and a non-financial milestone in the transitional process is extremely stringent, and will likely serve to make the transitional process only include resources that have been selected in PSCo's recent request for proposals. However, given the unique size of PSCo's queue, Western Power states that it does not oppose the proposed transitional requirements, but asks that the Commission only allow such a practice in extreme circumstances.<sup>118</sup>

83. Tradewind proposes additional changes to PSCo's proposed revisions, including: 1) modifying LGIP section 7.6 to reflect that re-study costs arising from withdrawal of an interconnection customer be borne by the withdrawing customer that causes the cost, rather than the interconnection customer that becomes the subject of the re-study; 2) moving the revised technical modeling practice information in LGIP section 7.3 from the tariff to a business practice manual; 3) deleting the language in LGIP section 7.7.1 that excludes Affected System's upgrades from the calculation of refunds for financial security readiness milestones; 4) deleting the words 'execute and' in LGIP section 10.1, and increasing the 30-day time frame to a 60-day negotiation period; 5) addressing the

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with the Final Rule; (3) allows affiliates of the original interconnection customers to use surplus interconnection service for another interconnecting generating facility consistent with the Final Rule; (4) allows for the transfer of surplus interconnection service that the original interconnection customer or one of its affiliates does not intend to use; and (5) specifies what reliability-related studies and approvals are necessary to provide surplus interconnection service and to ensure the reliable use of surplus interconnection service.

*Id.* at P 477.

<sup>117</sup> Interwest Comments at 6-7.

<sup>118</sup> Western Power Comments at 9-10.

incomplete last bullet in LGIP Appendix A-2; and 6) moving the language in LGIA Section 5.9.2 to the LGIP.

**b. Answer**

84. In its answer, PSCo states that Interwest appears to misunderstand PSCo's Reform Proposal, which does not include a separate preliminary queue. PSCo is proposing to offer an optional Informational Interconnection Study procedure in lieu of a separate preliminary queue. PSCo further states that to the extent Interwest is requesting that PSCo provide certain information during resource solicitations, PSCo notes that such resource solicitations are separate from PSCo's duties as a transmission provider and are governed by the requirements of the Colorado Public Utilities Commission.<sup>119</sup>

85. PSCo states that it opposes Tradewind's proposed modification regarding re-study costs because it would be difficult to implement and would subject interconnection customers to an unknown amount of cost liability. PSCo agrees with Tradewind's requested minor edits to Revised LGIP Section 10.1 and Appendix A-2, and proposes to make them in a compliance filing after Commission action.<sup>120</sup>

**c. Commission Determination**

86. Because we are rejecting PSCo's Reform Proposal, we will not address commenters' requests for modifications to PSCo's Reform Proposal.

The Commission orders:

PSCo's proposed Tariff revisions are hereby rejected without prejudice, as discussed in the body of this order.

By the Commission. Commissioner McName is not participating.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

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<sup>119</sup> PSCo Answer at 23-24.

<sup>120</sup> *Id.* at 24-26.