

March 3, 2020

#### VIA ELECTRONIC FILING

The Honorable Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Re: Public Service Company of Colorado

**Xcel Energy Operating Companies Open Access Transmission Tariff** 

Docket No. ER20- -000

**Revisions to Attachment N Large Generator Interconnection** 

**Procedures** 

#### Dear Secretary Bose:

Pursuant to section 205 of the Federal Power Act, 16 U.S.C. § 824d, part 35 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations, 18 C.F.R. § 35.13 (2018), and Order No. 714,¹ Public Service Company of Colorado ("PSCo")² submits revisions to the Xcel Energy Operating Companies FERC Electric Tariff, Third Revised Volume No. 1 ("Xcel Energy Tariff" or "Tariff").³ The revisions add to the Large Generator Interconnection Process ("LGIP")⁴ provided in Attachment N of the Tariff, which governs interconnection service on the PSCo Transmission System. PSCo proposes to define the process for evaluating modifications of an existing generator, including, but not limited to situations in which the generation facility is replaced with a

<sup>&</sup>lt;sup>1</sup> Electronic Tariff Filings, FERC Stats. & Regs. ¶ 31,276 (2008) ("Order No. 714").

PSCo is the designated e-Tariff filing entity for the Open Access Transmission Tariff of Northern States Power Company, Northern States Power Company (Wisconsin), Public Service Company of Colorado, and Southwest Public Service Company ("Xcel Energy Tariff"), consistent with the requirements of Order No. 714.

<sup>&</sup>lt;sup>3</sup> Xcel Energy Operating Companies, FERC Electric Tariff, Third Rev. Vol. No. 1.

When referencing PSCo's current LGIP, the term "Revised LGIP" is used and when referencing the LGIP described in Order 2003, the term "pro forma LGIP" is used. In both cases, the term LGIP incorporates all LGIP appendices, including the Large Generator Interconnection Agreement, or "LGIA".

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new facility that has a different fuel type. The proposed revisions are intended to benefit interconnection customers by providing a transparent process for existing generators to repower or replace their aging facilities while leveraging significant investments already made at the existing generator's site. PSCo's proposal will allow existing interconnection customers to avoid unnecessary study costs that would otherwise be imposed if the request to replace an existing generating facility was required to proceed through PSCo's full interconnection study queue process. These reforms will prevent generating facility owners seeking to make infrastructure investments from losing their existing interconnection service and potentially incurring significant costs to obtain replacement interconnection service at the same location. For these and other reasons, the Tariff revisions are consistent with or superior to the Commission's *pro forma* LGIPs and the Commission's policies announced in Order Nos. 890,<sup>5</sup> 2003,<sup>6</sup> and 845.<sup>7</sup> PSCo respectfully requests an effective date of May18, 2020 for the tariff modifications proposed, seventy-six (76) days after the date of this filing.

# I. Background

# A. Public Service Company of Colorado

PSCo is a wholly-owned subsidiary of Xcel Energy Inc. ("Xcel Energy"), a public utility holding company. PSCo is an integrated electric utility that, *inter alia*, generates, transmits, distributes, and sells regulated, cost-based electric energy to approximately 1.5 million retail customers in the state of Colorado subject to the jurisdiction of the Colorado Public Utilities Commission ("CPUC").<sup>8</sup> PSCo also provides wholesale, cost-based power sales (production services) to six wholesale customers pursuant to rate schedules on file with the Commission. PSCo provides open-access wholesale transmission service and

Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, 118 FERC ¶ 61,119, order on reh'g, Order No. 890-A, 121 FERC ¶ 61,297 (2007), order on reh'g, Order No. 890-B, 123 FERC ¶ 61,299 (2008), order on reh'g, Order No. 890-C, 126 FERC ¶ 61,228, order on clarification, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, 104 FERC ¶ 61,103 (2003), order on reh'g, Order No. 2003-A, 106 FERC ¶ 61,220, order on reh'g, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), order on reh'g, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC, 475 F.3d 1277 (D.C. Cir. 2007), cert. denied, 552 U.S. 1230 (2008).

<sup>&</sup>lt;sup>7</sup> Reform of Generator Interconnection Procedures and Agreements, Order No. 845, 163 FERC ¶ 61,043 (2018), order on reh'g, Order No. 845-A, 166 FERC ¶ 61,137 (2019) ("Order No. 845").

Xcel Energy Services, Inc. ("XES") is the centralized service company for the Xcel Energy holding company system and, *inter alia*, provides corporate and other services to PSCo and the other Xcel Energy Operating Companies. As such, XES makes filings with, and appears in proceedings before, the Commission on behalf of PSCo and the other Xcel Energy Operating Companies. The other Xcel Energy Operating Companies are Northern States Power Company, a Minnesota corporation, Northern States Power Company, a Wisconsin corporation (collectively "NSP" or the "NSP Companies"), and Southwestern Public Service Company ("SPS"). The NSP Companies operate in the MISO region, and SPS operates in the Southwest Power Pool, Inc. ("SPP") region. Thus, the proposed Tariff revisions apply only to the PSCo system.

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ancillary-only services to transmission customers and ancillary services customers under Parts II, III, or IV of the Xcel Energy Tariff, respectively. The ancillary-only customers represent load located in the PSCo BAA that are not directly connected to the PSCo Transmission System. PSCo offers non-discriminatory generator Interconnection Service for generators greater than 20 MW under Attachment N of the Tariff.<sup>9</sup>

PSCo and other public utilities in Colorado procure generation resources subject to electric resource plan ("ERP") and competitive solicitation processes regulated by the CPUC. Approximately 4,500 MW, or 40 percent, of PSCo's Designated Network Resources are non-affiliated third-party generation. This existing third-party, non-affiliated existing generation will benefit from the additional clarity provided by the modifications proposed in this instant filing. All third-party generation connected to PSCo's Transmission System (*i.e.*, generation not owned by a load-serving entity ("LSE")) is sold under long-term power purchase agreements ("PPAs") with an LSE.

The State of Colorado, and the utilities in the state have ambitious carbon reduction goals. Reaching these goals will require changes to the existing energy mix and the implementation of new technologies such as dispatchable renewable generation, advanced nuclear generation and carbon capture technologies. Achieving these goals will also require efficient utilization of existing infrastructure and removal of regulatory barriers for implementing lower cost solutions. The proposed modifications discuss therein will help achieve the carbon goals by describing a clear and equitable process for evaluating modifications to existing interconnected generation.

## B. PSCo's Current LGIP and LGIA

The interconnection procedures contained in Attachment N of PSCo's OATT were recently revised in Docket No. ER19-2774. PSCo's new procedures, which are referred to as the "Revised LGIP" in Attachment N, use a first-ready, first-served approach to studying and providing interconnection service. These revisions were intended to remedy a large backlog which had previously existed in PSCo's interconnection queue enabling more efficient processing of interconnection requests. PSCo's Revised LGIP reforms did not modify the provisions governing interconnection project modification requests in section 4.4.3 of FERC's *pro forma* LGIP. Section 4.4.3, in conjunction with the definitions section, require PSCo to determine whether a request by an interconnection customer to modify its interconnection request (or existing generating facility) would constitute a "material modification," meaning that it would "have a material impact on the cost or timing of any Interconnection Request with a later or equal Queue Position." 11

<sup>9</sup> PSCo also provides non-discriminatory Interconnection Service to Generators 20 MW or smaller under Attachment P to the Xcel Energy Tariff, the Small Generator Interconnection Procedures ("SGIP"). The proposed Tariff revisions would not change the Small Generator Interconnection Agreement set forth in Attachment P.

<sup>&</sup>lt;sup>10</sup> *Pub. Serv. Of Colo.*, 169 FERC ¶ 61,182 (2019).

<sup>11</sup> Revised LGIP, Definitions and § 4.4.3.

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If a modification request pertains to an *existing* facility, and if PSCo does not determine that the request would constitute a material modification, then the modification may occur pursuant to LGIA Article 5.19. PSCo's Revised LGIP retains Article 5.19 from the Commission's *pro forma* LGIA. Article 5.19.1 provides:

Either Party may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect the other Party's facilities, that Party shall provide to the other Party sufficient information regarding such modification so that the other Party may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Party at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require Interconnection Customer to submit an Interconnection Request, Transmission Provider shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the Transmission System, Transmission Provider's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof.

## C. MISO's Generator Replacement Reforms

On May 15, 2019, the Commission accepted amendments filed in Docket No. ER19-1065 by the Midcontinent Independent System Operator, Inc. ("MISO") to the Generator Interconnection Procedures ("GIPs") in Attachment X of it the MISO OATT.<sup>12</sup> MISO's amendments implemented a generator replacement procedure, upon which PSCo is now modeling its own proposal. MISO's reform permits the owners of retiring generators to replace the retiring facility with a new facility requiring equal or lesser interconnection capacity if: (1) the owner submits a replacement request at least one year prior to the retirement (with certain exceptions), (2) the replacement resource is located at the same electrical point of interconnection, (3) the replacement generation is commercial within three years of retirement and (4) the replacement of the retiring resource would not have a material adverse impact on the transmission system.<sup>13</sup> Additionally, interconnection

<sup>&</sup>lt;sup>12</sup> *Midcontinent Indep. Sys. Operator, Inc.*, 167 FERC ¶ 61,146 (2019) (the "MISO Generator Replacement Order").

<sup>&</sup>lt;sup>13</sup> *Id.* at PP 9-10.

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customers replacing a retiring resource many not sell, assign, or otherwise transfer the existing facility, replacement facility, or their interconnection agreement at any time starting form one year prior to the retirement until the replacement facility achieves commercial operation.<sup>14</sup>

In approving MISO's proposal, the Commission recognized that the generator replacement procedure would provide various benefits. Most of the benefits recognized by the Commission were not specific to MISO's status as an Independent System Operator, but instead are general benefits that would apply equally to interconnection service provided by PSCo. Notably, the Commission did not state that it was approving MISO's proposal under its independent entity variation standard, but instead appeared to be recognizing that generator replacement procedures have generally-applicable benefits and are therefore just and reasonable. Among other things, the Commission's order included the following holdings:

- The Commission held that the generator replacement process would "avoid duplicative study costs and operational costs that otherwise would occur when the request to replace an existing generating facility must proceed through the interconnection study queue process," because the full interconnection study queue process "can delay the replacement of older resources with more efficient and cost-effective resources." <sup>15</sup>
- The Commission held that the proposal "would prevent generating facility owners seeking to make infrastructure investments from losing their existing interconnection service and potentially incurring significant costs to obtain replacement interconnection service at the same location." <sup>16</sup>
- The Commission found "that it is not necessary to send these owners through a full interconnection process when the replacement generating facility will be using the same type and level of service as the existing generating facility and will cause no material impact on the MISO transmission system."<sup>17</sup>
- The Commission held that "existing generating facilities typically own other significant assets at their generation sites, including customer-owned interconnection facilities, land, and support buildings and equipment, all of which can potentially be reused by a replacement generating facility at the same site, creating efficiencies that eventually will be reflected in lower rates for ratepayers." 18

<sup>&</sup>lt;sup>14</sup> *Id.* at P 10.

<sup>&</sup>lt;sup>15</sup> *Id.* at P 61.

<sup>&</sup>lt;sup>16</sup> *Id.* at P 62.

<sup>&</sup>lt;sup>17</sup> *Id*.

<sup>&</sup>lt;sup>18</sup> *Id*.

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- The Commission found that the proposal appropriately treats existing and new interconnection customers differently, and is not unduly discriminatory, because "owners of generating facilities with an existing GIA seeking to replace and retire those facilities are not similarly situated to developers of new resources for the purpose of obtaining interconnection service in MISO." P 63 (two follow-on paragraphs on this)
- The Commission found that the proposal would promote, rather than restrict, market competition in generation development because it would "remove a barrier to more economic, efficient use of existing interconnection capability and reduce some of the current inefficiencies faced by the owners of existing generating facilities who wish to replace those facilities."<sup>20</sup>

# D. PSCo's Stakeholder Process Regarding Generator Replacement and Modification

Recognizing the benefits that a generation replacement process can provide, PSCo initiated a stakeholder process in 2019 to share its proposal and solicit feedback. PSCo held an open meeting on December 12, 2019 and requested feedback in early January 2020. Informal responses were generally supportive and PSCo did not receive comments opposing the proposal. PSCo also provided follow-up information to the Colorado Independent Energy Association, which is an association of independent developers in Colorado, on January 21, 2020.

# II. Description of Proposed Tariff Revisions

#### A. Overview

Here, PSCo is proposing tariff revisions to describe processes for the evaluation of interconnection customer proposed modifications to an existing Generating Facility, where the modification may include replacing the existing facility with a new facility of the same fuel type, or with a facility that uses a different fuel type. Consistent with FERC's proforma LGIP, the PSCo LGIA currently contains provisions for evaluating an interconnection customer's request to modify generation and interconnection customer's interconnection facilities. Under this Order No. 2003 mandated process, PSCo determines whether the proposed modification requires a new Interconnection Request by evaluating if the modification is "material." Material Modifications are not permitted, but modifications which are not material *are* permitted. If the modification results in an

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Id. at PP 63-65. The Commission explained that the owners of existing facilities have gone through some form of interconnection process and have faced cost responsibility for any required upgrades. Additionally, these existing customers' facilities have been part of the "base case" for transmission planning purposes. Id. at P 64. The Commission explained that, in contrast to existing customers, new customers have not yet gone through an interconnection study process, have not faced cost responsibility for any upgrades required to provide them with interconnection service, and have not yet become part of the transmission provider's base case study model. Id. at P 65.

<sup>&</sup>lt;sup>20</sup> *Id.* at P 71.

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adverse material impact on the transmission system, the modification is a Material Modification and so requires a new request, and if the modification does not have an adverse material impact on the transmission system, PSCo allows the modification to move forward. PSCo's proposed LGIP revisions will maintain an interconnection customer's existing rights granted under Order No. 2003 to request modifications but will add clarity and certainty about how modification requests will be studied.

PSCo's proposed revisions will provide procedures for both "Generating Facility Modification" requests<sup>21</sup> and for "Generating Facility Replacement" requests.<sup>22</sup> The Generating Facility Modification study process simply describes the study process currently used to affect the modification provisions in the *pro forma* LGIA. The current PSCo LGIP does not explicitly discuss situations in which the modification requested results in the replacement of an existing generation facility with a new facility. The proposed process for replacement is like the modification evaluation process currently under the Tariff but incorporates some specific additional requirements. Both study processes are described in detail below. Note that PSCo does *not* propose to revise the LGIP's procedures for modifying interconnection requests for projects that are in the study process.

For both modification and replacement, the request is approved if the change results in no adverse material impact to the transmission system compared with the existing generator. Requests associated with replacement must also meet several restrictions discussed in more detail below. Once approved, the modification or replacement may proceed without going through the full interconnection process. If the replacement or modification results in material adverse impacts or does not adhere to the additional restrictions associated with replacement, the modified interconnection request must go through the interconnection queue like a new generation interconnection request.

Additionally, if (i) a generator replacement request is approved, (ii) the existing generator is a designated Network Resource, and (iii) the replacement generator qualifies as a Network Resource, then the replacement generator will be grated Network Resource status without further study (the existing generator's Network Resource status transfers to the replacement generator).

A high-level overview of the generator replacement process is shown in Figure 1 below:

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PSCo Revised LGIP, Definitions ("Generating Facility Modification shall mean modification to an Existing Generating Facility, including comparable replacement of only a portion of the equipment at the Existing Generating Facility.")

<sup>22</sup> Id. ("Generating Facility Replacement shall mean replacement of one or more generating units and/or storage devices at an Existing Generating Facility with one or more new generating units or storage devices at the same electrical Point of Interconnection as those being decommissioned and electrically disconnected. The replacement facility may be of a different fuel type.").

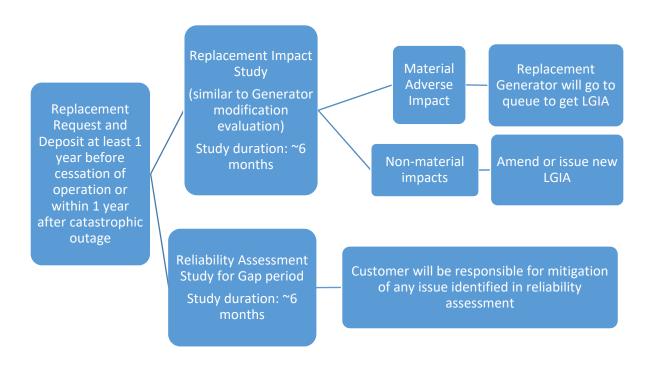


Figure 1. Flow diagram of the proposed Generating Facility Replacement study process

The proposed changes will provide interconnection customers with transparency and will ensure reasonable and non-discriminatory evaluation of requests to modify or replace existing generation facilities. The proposal is consistent with or superior to the *pro forma* LGIP and OATT because: (1) it improves the interconnection process, (2) it provides benefits to both interconnection customers and rate payers, (3) it removes the potential for discretion, and (4) it is not contrary to Commission policy.

# B. Description of Study Processes for Generator Modification Requests and Generator Replacement Requests

With these reforms, PSCo plans to evaluate all modifications to existing generating facilities, including modifications that would replace the existing generator with a generator of a different fuel type, with an evaluation that is similar to the "Material Modification" analysis provided for in section 4.4.3 of FERC's *pro forma* LGIPs. Similar to other Material Modification evaluations, PSCo will perform these evaluations outside of the Definitive Interconnection Study Process in PSCo's Revised LGIP. If a requested modification or replacement is determined to be *material*, meaning that it has an adverse impact on the transmission system, it will be required to be studied in PSCo's Definitive Interconnection Study Process as a new interconnection request.

Generator modification requests, meaning requests for existing generation facilities which do not result in the replacement of the generating units (or one of the generating units), will be processed in a manner that is consistent with Article 5.19 of the LGIA. PSCo

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will perform a study to determine whether the modification would result in a material adverse impact to the transmission system.<sup>23</sup> The study may include steady-state (thermal/voltage), reactive power, short circuit/fault duty, and stability analyses, as necessary, to ensure that required reliability conditions are evaluated. Consistent with the *pro forma* LGIA, if the modifications are expected to interrupt the flow of electricity, PSCo may evaluate the performance of the transmission system to determine if thermal and/or voltage violations of applicable NERC standards and transmission provider planning criteria are caused by the interruption of flow of electricity. The existing generating facility shall be responsible for mitigating any reliability violation for the period of interrupted electrical flow identified in the study and may not interrupt the flow of electricity until all mitigations are implemented. PSCo will provide the results of any modification studies within 30 days or such other time as parties agree.

Generator replacement requests, meaning requests that would replace one or more existing generating units with one or more new generating units, will require two newly defined studies: (1) a Generator Replacement Impact Study and (2) a Generator Replacement Interim Reliability Assessment Study. These studies are described in the newly proposed Revised LGIP Sections 3.9.3.1 and 3.9.3.2. The studies are like the studies used to evaluate Generating Facility Modification requests, but it is generally expected that evaluating complete replacement may take more study time than evaluating more limited modifications. Accordingly, PSCo proposes to use reasonable efforts to complete these replacement studies within one hundred eighty (180) days.

PSCo proposes certain conditions on replacing an existing generator with a new generator. These conditions include: (1) requiring notice of retirement at least one year prior to the planned retirement date, (2) a requirement that the new facility be in-service within three years of retirement or four years of a forced outage, (3) requiring the same point of interconnection, (3) retaining the same or a lower level of interconnection service (e.g NRIS to NRIS or NRIS to ERIS), (4) requesting the same or a lower volume of interconnection service (e.g. 400MW to 400MW or 400MW to 300 MW), (5) release of interconnection service rights if the replacement generator's interconnection service is less than the existing service amount, (6) a requirement that any excess capacity must be processed as a new request, (7) a restriction on the sale of the generator from a year before the request to study the retirement to the date the new generator is commercial and (8) a \$60,000 study deposit and execution of a study agreement. These requirements strike an appropriate balance between existing generators and new requests.

For a generator replacement request, the interconnection customer must submit a notice to proceed within thirty days of receiving its study results, and PSCo will provide a draft LGIA within 30 days of the customer's notice to proceed.<sup>24</sup> The draft LGIA will be based on the currently effective PSCo LGIA and will include: (1) the prohibition on assignment/transfer or sale discussed above and (2) a requirement that the new facility be commercial within three years of retirement or four years of a forced outage. These

<sup>&</sup>lt;sup>23</sup> See PSCo Revised LGIP § 3.9.1.

<sup>&</sup>lt;sup>24</sup> The draft LGIA may be an amended version of the existing LGIA.

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clarifications will be added to the appendices of the agreement and simply incorporate the terms described in the proposed Revised LGIP Section 3.9.2 into the LGIA.

The tables below show a side by comparison of PSCo's proposed Generator Modification and Generator Replacement processes:

Table 1: Study Cost and Study Time

-	Modification	Replacement
Study Deposit	N/A	\$60,000
Study Cost	Paid by Customer	Paid by Customer
Study Time	30 Days or Agreed Upon	180 Days

Table 2: Evaluation of Modification

Modification	Replacement
Adverse material impact study: steady-	Adverse material impact study: steady-
state (thermal/voltage), reactive power,	state (thermal/voltage), reactive power,
short circuit/fault duty, and stability	short circuit/fault duty, and stability
analyses, as necessary	analyses, as necessary

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Table 3: Reliability Assessment While Electric Flow is Interrupted Due to the Modification or Replacement

Modification	Replacement
Study the performance of the	Study the performance of the
Transmission System to determine if	Transmission System to determine if
thermal and/or voltage violations of	thermal and/or voltage violations of
applicable NERC Standards and	applicable NERC Standards and
Transmission Provider planning criteria	Transmission Provider planning criteria
are caused by the interruption of flow of	are caused by the interruption of flow of
electricity	electricity

Table 4: Additional Requirements

Tuote 1. Maditional Requireme	Modification	Replacement
Notice of	90 Days	365 Days
Modification/Replacement	, and the second	·
Incremental Increased	New Request	New Request
Interconnection Service		
Sale/Assignment	Allowed	Not within 1 year of request
		and until replacement is
		COD
New Commercial Operation	Within 3 years of ceasing	Within 3 years (4, if forced
Date	commercial operation	out) of ceasing commercial
		operation
Change in Interconnection	Not Allowed	Not Allowed
Point		
Unused Interconnection	Released	Released
Capacity		

#### III. Benefits of PSCo's Revisions

Non-independent Transmission Providers such as PSCo are required to show that any deviation from the Commission's *pro forma* LGIP and LGIA is "consistent with or superior to" the *pro forma* provisions adopted in Order No. 2003 and subsequent orders.<sup>25</sup> PSCo's proposal will provide various benefits, many of which are the same benefits that FERC recognized in the MISO Generator Replacement Order. The instant filing will provide these and other benefits to interconnection customers on the PSCo transmission system, as discussed below. PSCo's proposal is consistent with or superior to the Commission's *pro forma* LGIP and LGIA and should be approved.

Order No. 2003 at P 26 ("[N]on-independent Transmission Providers are required to adopt the Final Rule LGIP and Final Rule LGIA into their OATTs, with deviations from the Final Rule justified using either the 'regional differences' or 'consistent with or superior to' standard."); *id.* at P 826 (explaining that the "regional differences" standards is limited to deviations based on reliability requirements); *accord* Order No. 2003-A at P 756.

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## A. Process Benefits

PSCo's proposal improves the interconnection process both for existing customers that are requesting replacement or modification, as well as for new interconnection customers. For customers with existing generating facilities, the proposed process (1) provides improved transparency about how modification and replacement requests will be processed, (2) reduces opportunity for discriminatory treatment for evaluating replacement and modification requests, and (3) avoids unnecessary study costs that otherwise would occur if the request would have to proceed through the Definitive Interconnection Study Process. By adding a clear process in the LGIP, existing interconnection customers know how modification or replacement requests will be processed. The proposed processes will also ensure equal and reasonable treatment of requests. With the proposed transparent and non-discriminatory process, existing interconnection customers avoid unnecessary costs and delays to achieve their business goals.

For customers making new interconnection requests, PSCo's proposal helps to ensure that the process used to evaluate a new interconnection request is efficient and is not incumbered by existing generators evaluating potential replacement options. The proposal keeps PSCo's newly-approved Definitive Interconnection Study Process streamlined. The Definitive Interconnection Study Process is designed to evaluate the impact on the transmission system of projects that are ready to proceed, and to assign the cost of upgrades required for interconnection service to these new, ready projects. If a modification or a replacement does not have a material adverse impact on the transmission system, then no upgrades are required to facilitate the requested change (modification or replacement) and it is therefore unnecessary to include those requests in the cluster studies of the Definitive Interconnection Study Process. The evaluation of new requests is not impacted if the existing generator or the new generator is in the base model. If the replacement generator was required to enter the Definitive Interconnection Study Process simply to evaluate the potential for material adverse impact, and that interconnection customer decided to retain the existing generator and not move forward with replacement, it would cause delays to by withdrawing from the Definitive Interconnection Study Process. By studying requests for modifications to and replacement of existing resource separately, and by requiring a new interconnection request and DISIS study only if the request has an adverse impact on the transmission system, PSCo's proposal will help ensure that DISIS clusters will be efficiently studied.

# **B.** Policy Benefits

PSCo's proposal also provides policy benefits. It is desirable to allow an existing interconnection customer to retain its contractual interconnection service rights while the underlying generating facility is undergoing modification or replacement. Allowing such changes is consistent with or superior to the *pro forma* LGIP.

The *pro forma* LGIA allows modifications to an existing generating facility or to interconnection customer owned interconnection facilities without requiring submission of

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a new Interconnection Request.<sup>26</sup> In allowing modifications that do not require new Interconnection Requests, the Commission acknowledged that the contractual interconnection rights should be retained for modifications that do not increase the capacity of the interconnection service and do not have a material adverse impact to the transmission system. The *pro forma* LGIA requires that modifications that do not result in a new Interconnection Request be studied and processed outside of the full interconnection process. It is therefore consistent with the *pro forma* LGIP to allow modifications that do not increase the service capacity, and that do not result in a material adverse impact to the transmission system, to be approved without going through the full interconnection process.

With respect to generator replacement, the Commission has explained that "existing generating facilities typically own other significant assets at their generation sites, including customer-owned interconnection facilities, land, and support buildings and equipment, all of which can potentially be reused by a replacement generating facility at the same site, creating efficiencies that eventually will be reflected in lower rates for ratepayers." PSCo agrees with the Commission that allowing existing aging generating facilities to be replaced with more cost effective facilities—using the existing land, support buildings, and interconnection service—will benefit rate payers.

The proposal will not only benefit ratepayers though lower energy costs, it will also help keep transmission rates low. The existing transmission system was designed to support existing resources. If generation owners are not permitted to replace their retiring facilities, those facilities may instead be replaced with new facilities at different locations on the transmission system. This will significantly modify flows on the transmission system. Significant modification of flows can result in reliability impacts that would result in: (1) the decreased utilization of some existing transmission assets and (2) additional Network Upgrades. Since Network Upgrades are ultimately paid for by transmission customers; minimizing Network Upgrade costs is good for all transmission customers. In addition to the interconnection customer's facilities and equipment that can be reused, replacing generation at the existing location (i.e., using a "brownfield" site) benefits all transmission customers because it uses the existing transmission infrastructure as it was designed to be used.

See pro forma LGIP Article 5.19.

<sup>&</sup>lt;sup>27</sup> MISO Generator Replacement Order at P 62.

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## C. Transparency Benefits

PSCo's proposal will also provide greater transparency to interconnection customers. For generator modifications, it may be difficult under the current tariff for an existing interconnection customer to know if a proposed modification will require a new Interconnection Request and the customer may be unclear as to the process that PSCo will use to determine if the modification requires a new Interconnection request. PSCo's proposal addresses these issues.

Today, consistent with the *pro forma* LGIA, modifications of existing facilities are allowed under the PSCo's LGIA and LGIP. Such modifications may include the replacement of turbines, exciters, boilers, wind generating machines, or other modifications to the Generating Facility that do not require a new Interconnection Request. Article 5.19 of the LGIA provides that: (1) the Interconnection Customer must provide information (drawings, plans, specifications) to the Transmission Provider at least 90 days before the modification and (2) within 30 days, the Transmission Provider must provide an estimate of any required modifications to the Transmission System, Transmission Provider's Interconnection Facilities, or Network Upgrades.<sup>28</sup> However, Article 5.19 does not explain how the Transmission Provider should determine whether the request would require a new Interconnection Request. PSCo's proposal provides clarity on this point.

Additionally, there is a lack of clarity in the existing tariff for interconnection customers that plan to replace all or a portion of their existing facility. PSCo has observed it is industry practice to allow wind farms to completely replace the facility under the modification provisions in the LGIA, and PSCo has recently permitted such a modification.<sup>29</sup> Because solar and wind facilities consist of a number of separate generating units, and customers are generally permitted to replace parts of the facility under the modification provisions of the *pro forma* LGIA. For generators utilizing conventional fuel sources (e.g., coal or nuclear), modifications necessary to improve efficiency or reduce emissions may not be allowed under the modification provisions of the *pro forma* LGIA. It is unclear to PSCo if an existing coal generator could be replaced with a more efficient coal generator that incorporates carbon capture technology under the terms of the *pro forma* 

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The parties may agree to an alternate deadline in lieu of the Transmission Provider's 30 day deadline under Article 5.19.1.

PSCo recently evaluated and approved a request to completely replace all of the wind generating turbines of an existing wind generating facility under the modification terms of the LGIA. This replacement improved the efficiency of the generating unit, which increases the capacity factor of the facility, while not increasing the amount of interconnection service. PSCo filed amendments to this non-conforming LGIA and the Commission accepted this modification where the updated agreement allowed the interconnection customer to replace the existing one-hundred eight (108) 1.5 MW Double Fed Induction Generators (DFIGs) with one-hundred (100) 1.62 MW DFIGs. Letter Order dated October 18, 2019 in ER19-2740. The replacement generation did not increase the total volume of interconnection service and did not have a material adverse impact on the Transmission System. Although PSCo processes such requests, where the generator replaces the entire facility, the criteria and study process used is not transparent because it is not detailed in the Tariff. See also, for instance, MISO Order at P.6

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LGIA. As another example, there is similar uncertainty for owners that desire to replace one existing coal generator at a multi-unit coal generating facility with gas powered generation. Instead of leaving such matters to PSCo's discretion, PSCo believes that it would be far preferable for generation owners to be able to refer to clear tariff language to explain what rights they have to partially or fully replace their existing facilities. PSCo's proposed amendments are intended to accomplish this.

## D. Equal Treatment

PSCo's proposal will also ensure that all interconnection customers are treated in an equal and non-discriminatory manner. First, by incorporating into the tariff a description of how PSCo will determine whether a new Interconnection Request is required, PSCo removes any potential for discriminatory treatment between its own generation resources and third-party resources. 30 Second, although PSCo must respect the modification terms of each specific interconnection agreement, this instant filing applies the same process for pre- and post-Order No. 2003 projects, which will ensure that similar treatment is provided.<sup>31</sup> Third, the proposal will prohibit disparity in treatment between fuel types. As discussed above, a wind generator may replace its facility with a new wind facility under the terms of the LGIA, but the same may not be true for other fuel types or changes in fuel type. In the case there is a dispute between the customer and the transmission provider about whether the replacement process or the modification process applies (for instance, for the replacement of all wind turbines in a wind facility), the replacement process will be used. All resource modification or replacement requests, regardless of fuel type, will be evaluated under the same clear and transparent standards. The pro forma LGIA gives the Transmission Provider the discretion to terminate an LGIA after the generator has ceased commercial operation for 90 days and PSCo's proposal removes this discretion for generators undergoing replacement. PSCo's proposal results in requiring the termination of the LGIA three years after cessation of commercial operation, unless a replacement request is approved, in which case the LGIA is terminated when the new or amended LGIA is effective.

#### E. Contractual Considerations of LGIA Termination

PSCo's proposal does not change the fundamental state of interconnection as a contractual right provided by the LGIA. PSCo's proposal does not extend the terms of the LGIA in perpetuity and does not create a new property right. Under the FERC *pro forma* LGIA, transmission providers have the discretion, but not the requirement, to terminate an LGIA "after the Generating Facility permanently ceases Commercial Operation." The

PSCo confirms that it does not treat third party resources differently from its own resources when evaluating modifications or replacement; the proposed modification will reinforce PSCo's nondiscriminatory treatment of all customers.

Customers that pre-date Order 2003 either do not have interconnection agreements or have agreements that do not conform to the pro forma LGIA.

FERC pro forma LGIA, Article 2.3.

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termination procedures as they apply to PSCo were recently modified in the Revised LGIP to *require* termination if the generator has ceased operation for three years, but still allow PSCo discretion to terminate the LGIA earlier.<sup>33</sup>

PSCo's instant proposal would not change the general nature of interconnection rights on PSCo's system. The LGIA remains in effect as long as the generator remains in operation. Under PSCo's proposal, termination of an LGIA is still required after three years if a retired generation facility has not been replaced. PSCo's instant proposal would affect only PSCo's discretion to terminate an LGIA during the initial three years following a retirement (or four years in the case of a catastrophic failure). Going forward, interconnection customers who follow PSCo's Generating Facility Replacement procedures would be assured the right to use those years to replace their retiring facility.

## F. Existing Generators are Not Similarly Situated to New Requests

PSCo notes also that the owners of existing generation facilities with LGIAs are not similarly situated to customers that are requesting new interconnection service, and it therefore makes sense to treat the two classes of customer differently for study purposes. The owners of existing generating facilities already have gone through some form of interconnection process and have already borne any cost responsibility for upgrades that were necessary to permit their operation at their specific points of interconnection. These existing generating facilities have been part of the "base case" for transmission planning purposes, and their capacity and electrical characteristics were studied when they went through the applicable interconnection study process. Coupled with the generating facility's history of actual operations, this data provides a practical benchmark of what generation capacity and electrical characteristics can operate without new network upgrades at that point of interconnection. As such, it is unnecessary to send existing interconnection projects through a new Definitive Interconnection Study Process, as PSCo does for new interconnection requests. PSCo's proposed Replacement Impact Study will ensure that a replacement generating facility does not materially affect the transmission system, and if that study determines that there are reliability impacts, the proposed facility must be studied through PSCo's Definitive Interconnection Study Process, like new entrants.<sup>34</sup> This study approach is appropriately tailored for replacement generation facilities.

In contrast to an existing generating facility owner, a new interconnection customer

PSCo retains the discretion to terminate an LGIA in the period between 90 days and three years. In this instant filing, PSCO clarifies the termination process where a generator replacement has been studied and approved. From the Revised LGIP: "This LGIA shall be terminated by Transmission Provider if the Generating Facility or a portion of the Generating Facility having previously achieved Commercial Operation, has ceased Commercial Operation for three (3) consecutive years, beginning with the last date of Commercial Operation for the Generating Facility, after giving Interconnection Customer ninety (90) Calendar Days advance written notice.

<sup>&</sup>lt;sup>34</sup> See MISO Generator Replacement Order at PP 63-64.

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that seeks to build a new generating facility has not previously gone through the Definitive Interconnection Study Process or any predecessor process, has never been evaluated for its impact on the transmission system, has not already faced potential cost responsibility for any upgrades needed to accommodate the interconnection service level, does not presently have interconnection service, has not already become part of the base case for PSCo's models, and has not demonstrated reliability though actual operation. Even if a new entrant at another point of interconnection ultimately does not require any network upgrades to interconnect, this fact can only be determined conclusively once that interconnection customer's project has been subject to PSCo's interconnection process, which includes system impact studies and a detailed facilities study.<sup>35</sup> As such, and as FERC has recognized in its recent MISO Generator Replacement Order, existing interconnection customers and new customers are not similarly situated.

## G. Consistent With and Not Prohibited by Order No. 845

The Commission held in Order No. 845 that retirement and repowering issues were outside the scope of that rulemaking.<sup>36</sup> In addition, on rehearing of Order No. 845, the American Wind Energy Association asked the Commission to clarify that the rules and processes that exist for replacement or repowering are also available to surplus interconnection service customers.<sup>37</sup> The Commission responded that "[t]o the extent that a particular transmission provider has repowering/replacement provisions in its tariff, nothing in Order No. 845 would alter those provisions."<sup>38</sup> Order No. 845 therefore did not preclude generator replacement and modification reforms such as PSCo's proposal.

Furthermore, PSCo's proposal does not contradict Order No. 845's surplus interconnection service reforms.<sup>39</sup> In Order No. 845, the Commission held that surplus interconnection service will not extend past the retirement date of the underlying generating facility. The purpose of the surplus interconnection service reforms in Order No. 845 is fundamentally different from the purpose of PSCo's generator replacement proposal. In Order No. 845, the Commission restricted the ability of generating facility owners to offer surplus interconnection service past the retirement date of the generating

<sup>36</sup> Order No. 845, 163 FERC ¶ 61,043 at P 503.

<sup>&</sup>lt;sup>35</sup> See id. at P 65.

<sup>&</sup>lt;sup>37</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 144.

<sup>38</sup> Id. P 147 (internal citations omitted). The Commission also explained that "Furthermore, if a particular repowering/replacement process is successful, any continued operation from that point forward would then be under a new interconnection agreement associated with the outcome of the successful repowering/replacement process." Id.

In its order on MISO's generator replacement proposal, the Commission noted that the proposal was not inconsistent with FERC's policy regarding surplus interconnection service. See MISO Generator Replacement Order at P 68.

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facility. 40 The Commission's surplus interconnection reforms allow a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific parameters.<sup>41</sup> As the Commission noted in Order No. 845, surplus interconnection service is by definition tied to the continued existence of the original interconnection customer's interconnection service. Once the original interconnection service terminates, there is no longer an original interconnection service from which the ability to provide surplus interconnection service could be identified.<sup>42</sup> PSCo's generator replacement proposal has a different goal—to allow existing generating facilities to be replaced in their entirety, as long as there are no material adverse impacts to the PSCo transmission system. Rather than tying a new resource to the continued existence of the original interconnection service, PSCo's proposal is intended to replace that original interconnection service at the same point of interconnection with interconnection service that is essentially identical and tied to a contractual arrangement under a new or amended LGIA. Therefore, the Commission's finding in Order No. 845 that surplus interconnection service should not be available when the original interconnection customer retires does not apply to PSCo's generator replacement proposal.

# IV. Information Related to the Effect of the Rate Change

This filing does not change the rate charged for transmission services, interconnection services or study costs. PSCo proposes a \$60,000 deposit for study costs, if a study is required, but will charge actual costs for the study as required for other studies under the *pro forma* LGIP.

#### V. Additional Information Submitted in Support of Filing

- A. Information Required by Section 35.13 of the Commission's Regulations, 18 C.F.R. § 35.13
  - 1. Contents of Filing Section 35.13(b)(1)

In addition to this transmittal letter, this filing includes the following:

- The revised Attachment N (LGIP) and Section 30 (Network Resources), in clean eTariff format;
- The revised Attachment N (LGIP) and Section 30 (Network Resources), in marked format;
  - 2. Requested Effective Date Section 35.13(b)(2) Waiver Request

Surplus interconnection service is any unused portion of interconnection service established in an LGIA, such that if surplus interconnection service is utilized the interconnection service limit at the point of interconnection would remain the same. See Order No. 845, 163 FERC ¶ 61,043 at P 459.

<sup>&</sup>lt;sup>41</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

<sup>&</sup>lt;sup>42</sup> Order No. 845, 163 FERC ¶ 61,043 at P 504.

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PSCo respectfully requests an effective date of May18, 2020, seventy-six (76) days after filing, without suspension.

# 3. The Names and Addresses of Persons to Whom a Copy of the Rate Change Has Been Posted – Section 35.13(b)(3)

An electronic notice of this filing will be served on the Colorado Public Utilities Commission and all affected PSCo transmission service customers and ancillary service customers taking service under the Xcel Energy Tariff. A courtesy copy will be served on the Commission's Director of the Division of Electric Power Regulation (West). Pursuant to 18 C.F.R. § 35.2(d), a copy of this filing will be posted for public inspection at the offices of Xcel Energy – Transmission Services at 414 Nicollet Mall – 6th Floor, Minneapolis, Minnesota 55401; and at the offices of PSCo – Transmission at 18201 West 10th Avenue, Golden, Colorado 80401. A copy of the filing also will be posted at the OASIS/Open Access Transmission Tariff link at the Transmission page of the Xcel Energy Inc. website (http://www.transmission.xcelenergy.com).

# 4. Brief Description of Rate Change – Section 35.13(b)(4)

See Sections II and III above. The proposed revisions do not constitute a rate change.

# 5. Statement of Reasons for Rate Change – Section 35.13(b)(5)

See Sections II and III above. The proposed revisions do not constitute a rate change.

## 6. Requisite Agreement for Rate Change – Section 35.13(b)(6)

See Sections II and III above.

# 7. Statement Showing Expenses or Costs Included in Cost-of-Service Statements – Section 35.13(b)(7)

None of the costs related to this filing have been alleged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory practices.

#### VI. COMMUNICATIONS AND CORRESPONDENCE

Correspondence and communications with respect to this filing should be sent to, and XES requests the Secretary include on the official service list, the following:<sup>43</sup>

<sup>&</sup>lt;sup>43</sup> To the extent necessary, XES respectfully requests waiver of Rule 203(b)(3) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.203(b), to permit all of the persons listed to be placed on the official service list for this proceeding.

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Tim.T.Mastrogiacomo@xcelenergy.com

## VII. CONCLUSION

PSCo sincerely appreciates the Commission's review of this filing. PSCo respectfully requests that the Commission accept the revised eTariff records, to be effective May18, 2020. Please direct any questions regarding this instant filing to Dr. Liam Noailles at (303) 571-2794.

Respectfully submitted,

/s/ Liam D. Noailles
Dr. Liam D. Noailles
Manager, Federal Regulatory Affairs
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Telephone: (303) 571-2794

Email: Liam.D.Noailles@xcelenergy.com

Cc: PSCo Tariff Customers

Director, Division of Tariffs and Market Development (West)

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## **CERTIFICATE OF SERVICE**

I, Elizabeth Walkup, hereby certify that I have this day electronically served a notice of the enclosed filing on the state Colorado Public Utilities Commission, on each customer taking transmission service from PSCo or generation interconnection service from PSCo, and all customers in PSCo's interconnection queue under the Xcel Energy Tariff.

Dated at Minneapolis, Minnesota this 3rd day of March 2020.

/s/ Elizabeth Walkup
Elizabeth Walkup
Xcel Energy/Responsible by Nature
Transmission Business Analyst
Xcel Energy Services Inc.
414 Nicollet Mall, 6th Floor
Minneapolis, MN 55401
(612) 330-6780

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March 4, 2020

#### VIA ELECTRONIC FILING

The Honorable Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Re: Public Service Company of Colorado

**Xcel Energy Operating Companies Open Access Transmission Tariff** 

Docket No. ER20-1153-000 Errata to Transmittal Letter

#### Dear Secretary Bose:

On March 3, 2020, Public Service Company of Colorado ("PSCo") submitted revisions to the Large Generator Interconnection Process provided in Attachment N and Network Resources provided in Section 30 of the Tariff the Xcel Energy Operating Companies FERC Electric Tariff, Third Revised Volume No. 1.¹ It subsequently came to our attention that the March 3 filing included an incorrect version of the Transmittal Letter, which was submitted with "DRAFT – 15FEB2020" and "Attorney-Client Privilege" in the header. The transmittal letter that was filed was in final form and did not contain any privileged material, but merely retained this header by mistake. With this errata filing, PSCo submits a corrected version of the Transmittal Letter. The corrected version of the Transmittal Letter is intended to fully replace the incorrect version included in the March 3 filing.

Respectfully submitted,

/s/ Elizabeth Walkup
Elizabeth Walkup
Business Analyst
Xcel Energy Services Inc.
414 Nicollet Mall
Minneapolis, MN 55401

Telephone: (612) 330-6780

Email: elizabeth.a.walkup@xcelenergy.com

<sup>&</sup>lt;sup>1</sup> Xcel Energy Operating Companies, FERC Electric Tariff, Third Rev. Vol. No. 1.

Cc:

**PSCo Tariff Customers** 

Director, Division of Tariffs and Market Development (West)

**CERTIFICATE OF SERVICE** 

I, Elizabeth Walkup, hereby certify that I have this day electronically served a

notice of the enclosed filing on the official service list maintained by the Commission for

this proceeding, on the state Colorado Public Utilities Commission, on each customer

taking transmission service from PSCo or generation interconnection service from PSCo,

and all customers in PSCo's interconnection queue under the Xcel Energy Tariff.

Dated at Minneapolis, Minnesota this 4th day of March, 2020.

/s/ Elizabeth Walkup

Elizabeth Walkup Xcel Energy/Responsible by Nature Transmission Business Analyst 414 Nicollet Mall, 6th Floor Minneapolis, MN 55401 (612) 330-6780 elizabeth.a.walkup@xcelenergy.com

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#### 30 Network Resources

- 30.1 Designation of Network Resources: Network Resources shall include all generation owned, purchased or leased by the Network Customer designated to serve Network Load under the Tariff. For purposes of temporary termination under Section 30.3, all or part of such generation associated with a NERC-registered Point of Receipt, behind which there are no constraints, may be treated as a single Network Resource. Network Resources may not include resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. Any owned or purchased resources that were serving the Network Customer's loads under firm agreements entered into on or before the Service Commencement Date shall initially be designated as Network Resources until the Network Customer terminates the designation of such resources.
- 30.2 Designation of New Network Resources: The Network Customer may designate a new Network Resource by providing the Transmission Provider with as much advance notice as practicable. A designation of a new Network Resource must be made through the Transmission Provider's OASIS by a request for modification of service pursuant to an Application under Section 29. This request must include a statement that the new network resource satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) The Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.
- **Termination of Network Resources:** The Network Customer may terminate the designation of all or part of a generating resource as a Network Resource by providing notification to the Transmission Provider through OASIS as soon as reasonably practicable, but not later than the firm scheduling deadline for the period of termination. Any request for termination of Network Resource status must be submitted on OASIS, and should indicate whether the request is for indefinite or temporary termination.

A request for indefinite termination of Network Resource status must indicate the date and time that the termination is to be effective, and the identification and capacity of the resource(s) or portions thereof to be indefinitely terminated. If the indefinite termination of the Network Resource is associated with an

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approved Generating Facility Replacement processed under Section 3.9 of Attachment N (Revised LGIP), and the termination request identifies the related new Network Resource request associated with the Replacement Generating Facility, the related service requests must be approved as a single request and the Designated Network Resource status of the Existing Generating Facility shall be transferred to the Replacement Generating Facility.

A request for temporary termination of Network Resource status must include the following:

- (i) Effective date and time of temporary termination;
- (ii) Effective date and time of redesignation, following period of temporary termination;
- (iii) Identification and capacity of resource(s) or portions thereof to be temporarily terminated or where appropriate, identification of the NERCregistered Point of Receipt to which Network Resources are assigned and the capacity to be temporarily terminated;
- (iv) Resource description and attestation for redesignating the network resource following the temporary termination, in accordance with Section 30.2; and
- (v) Identification of any related transmission service requests to be evaluated concomitantly with the request for temporary termination, such that the requests for undesignation and the request for these related transmission service requests must be approved or denied as a single request. The evaluation of these related transmission service requests must take into account the termination of the network resources identified in (iii) above, as well as all competing transmission service requests of higher priority.

As part of a temporary termination, a Network Customer may only redesignate the same resource that was originally designated, or a portion thereof. Requests to redesignate a different resource and/or a resource with increased capacity will be deemed deficient and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.

30.4 Operation of Network Resources: The Network Customer shall not operate its designated Network Resources located in the Network Customer's or Transmission Provider's Control Area such that the output of those facilities exceeds its designated Network Load, plus Non-Firm Sales delivered pursuant to Part II of the Tariff, plus losses, plus power sales under a reserve sharing program, plus sales that permit curtailment without penalty to serve its designated Network Load. This limitation shall not apply to changes in the operation of a Transmission Customer's Network Resources at the request of the Transmission Provider to respond to an emergency or other unforeseen

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condition which may impair or degrade the reliability of the Transmission System. For all Network Resources not physically connected with the Transmission Provider's Transmission System, the Network Customer may not schedule delivery of energy in excess of the Network Resource's capacity, as specified in the Network Customer's Application pursuant to Section 29, unless the Network Customer supports such delivery within the Transmission Provider's Transmission System by either obtaining Point-to-Point Transmission Service or utilizing secondary service pursuant to Section 28.4. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Network Customer's schedule at the delivery point for a Network Resource not physically interconnected with the Transmission Provider's Transmission System exceeds the Network Resource's designated capacity, excluding energy delivered using secondary service or Point-to-Point Transmission Service.

- Network Customer Redispatch Obligation: As a condition to receiving Network Integration Transmission Service, the Network Customer agrees to redispatch its Network Resources as requested by the Transmission Provider pursuant to Section 33.2. To the extent practical, the redispatch of resources pursuant to this section shall be on a least cost, non-discriminatory basis between all Network Customers, and the Transmission Provider.
- Transmission Arrangements for Network Resources Not Physically Interconnected With The Transmission Provider: The Network Customer shall be responsible for any arrangements necessary to deliver capacity and energy from a Network Resource not physically interconnected with the Transmission Provider's Transmission System. The Transmission Provider will undertake reasonable efforts to assist the Network Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other entity pursuant to Good Utility Practice.
- **30.7** Limitation on Designation of Network Resources: The Network Customer must demonstrate that it owns or has committed to purchase generation pursuant to an executed contract in order to designate a generating resource as a Network Resource. Alternatively, the Network Customer may establish that execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff.
- 30.8 Use of Interface Capacity by the Network Customer: There is no limitation upon a Network Customer's use of the Transmission Provider's Transmission System at any particular interface to integrate the Network Customer's Network Resources (or substitute economy purchases) with its Network Loads. However, a Network Customer's use of the Transmission Provider's total interface capacity with other transmission systems may not exceed the Network Customer's Load.
- **30.9 Network Customer Owned Transmission Facilities:** The Network Customer that owns existing transmission facilities that are integrated with the

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Transmission Provider's Transmission System may be eligible to receive consideration either through a billing credit or some other mechanism. In order to receive such consideration the Network Customer must demonstrate that its transmission facilities are integrated into the plans or operations of the Transmission Provider to serve its power and transmission customers. For facilities added by the Network Customer subsequent to July 13, 2007, the Network Customer shall receive credit for such transmission facilities added if such facilities are integrated into the operations of the Transmission Provider's facilities; provided however, the Network Customer's transmission facilities shall be presumed to be integrated if such transmission facilities, if owned by the Transmission Provider, would be eligible for inclusion in the Transmission Provider's annual transmission revenue requirement as specified in Attachment H. Calculation of any credit under this subsection shall be addressed in either the Network Customer's Service Agreement or any other agreement between the Parties.

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#### 30 Network Resources

30.1 Designation of Network Resources: Network Resources shall include all generation owned, purchased or leased by the Network Customer designated to serve Network Load under the Tariff. For purposes of temporary termination under Section 30.3, all or part of such generation associated with a NERC-registered Point of Receipt, behind which there are no constraints, may be treated as a single Network Resource. Network Resources may not include resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. Any owned or purchased resources that were serving the Network Customer's loads under firm agreements entered into on or before the Service Commencement Date shall initially be designated as Network Resources until the Network Customer terminates the designation of such resources.

- 30.2 Designation of New Network Resources: The Network Customer may designate a new Network Resource by providing the Transmission Provider with as much advance notice as practicable. A designation of a new Network Resource must be made through the Transmission Provider's OASIS by a request for modification of service pursuant to an Application under Section 29. This request must include a statement that the new network resource satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) The Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.
- **Termination of Network Resources:** The Network Customer may terminate the designation of all or part of a generating resource as a Network Resource by providing notification to the Transmission Provider through OASIS as soon as reasonably practicable, but not later than the firm scheduling deadline for the period of termination. Any request for termination of Network Resource status must be submitted on OASIS, and should indicate whether the request is for indefinite or temporary termination.

A request for indefinite termination of Network Resource status must indicate the date and time that the termination is to be effective, and the identification and capacity of the resource(s) or portions thereof to be indefinitely terminated. If the indefinite termination of the Network Resource is associated with an

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approved Generating Facility Replacement processed under Section 3.9 of Attachment N (Revised LGIP), and the termination request identifies the related new Network Resource request associated with the Replacement Generating Facility, the related service requests must be approved as a single request and the Designated Network Resource status of the Existing Generating Facility shall be transferred to the Replacement Generating Facility.

- A request for temporary termination of Network Resource status must include the following:
  - (i) Effective date and time of temporary termination;
  - (ii) Effective date and time of redesignation, following period of temporary termination;
  - (iii) Identification and capacity of resource(s) or portions thereof to be temporarily terminated or where appropriate, identification of the NERCregistered Point of Receipt to which Network Resources are assigned and the capacity to be temporarily terminated;
  - (iv) Resource description and attestation for redesignating the network resource following the temporary termination, in accordance with Section 30.2; and
  - (v) Identification of any related transmission service requests to be evaluated concomitantly with the request for temporary termination, such that the requests for undesignation and the request for these related transmission service requests must be approved or denied as a single request. The evaluation of these related transmission service requests must take into account the termination of the network resources identified in (iii) above, as well as all competing transmission service requests of higher priority.

As part of a temporary termination, a Network Customer may only redesignate the same resource that was originally designated, or a portion thereof. Requests to redesignate a different resource and/or a resource with increased capacity will be deemed deficient and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.

30.4 Operation of Network Resources: The Network Customer shall not operate its designated Network Resources located in the Network Customer's or Transmission Provider's Control Area such that the output of those facilities exceeds its designated Network Load, plus Non-Firm Sales delivered pursuant to Part II of the Tariff, plus losses, plus power sales under a reserve sharing program, plus sales that permit curtailment without penalty to serve its designated Network Load. This limitation shall not apply to changes in the operation of a Transmission Customer's Network Resources at the request of the Transmission Provider to respond to an emergency or other unforeseen

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condition which may impair or degrade the reliability of the Transmission System. For all Network Resources not physically connected with the Transmission Provider's Transmission System, the Network Customer may not schedule delivery of energy in excess of the Network Resource's capacity, as specified in the Network Customer's Application pursuant to Section 29, unless the Network Customer supports such delivery within the Transmission Provider's Transmission System by either obtaining Point-to-Point Transmission Service or utilizing secondary service pursuant to Section 28.4. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Network Customer's schedule at the delivery point for a Network Resource not physically interconnected with the Transmission Provider's Transmission System exceeds the Network Resource's designated capacity, excluding energy delivered using secondary service or Point-to-Point Transmission Service.

- Network Customer Redispatch Obligation: As a condition to receiving Network Integration Transmission Service, the Network Customer agrees to redispatch its Network Resources as requested by the Transmission Provider pursuant to Section 33.2. To the extent practical, the redispatch of resources pursuant to this section shall be on a least cost, non-discriminatory basis between all Network Customers, and the Transmission Provider.
- Transmission Arrangements for Network Resources Not Physically Interconnected With The Transmission Provider: The Network Customer shall be responsible for any arrangements necessary to deliver capacity and energy from a Network Resource not physically interconnected with the Transmission Provider's Transmission System. The Transmission Provider will undertake reasonable efforts to assist the Network Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other entity pursuant to Good Utility Practice.
- **30.7 Limitation on Designation of Network Resources:** The Network Customer must demonstrate that it owns or has committed to purchase generation pursuant to an executed contract in order to designate a generating resource as a Network Resource. Alternatively, the Network Customer may establish that execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff.
- 30.8 Use of Interface Capacity by the Network Customer: There is no limitation upon a Network Customer's use of the Transmission Provider's Transmission System at any particular interface to integrate the Network Customer's Network Resources (or substitute economy purchases) with its Network Loads. However, a Network Customer's use of the Transmission Provider's total interface capacity with other transmission systems may not exceed the Network Customer's Load.
- **30.9 Network Customer Owned Transmission Facilities:** The Network Customer that owns existing transmission facilities that are integrated with the

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Transmission Provider's Transmission System may be eligible to receive consideration either through a billing credit or some other mechanism. In order to receive such consideration the Network Customer must demonstrate that its transmission facilities are integrated into the plans or operations of the Transmission Provider to serve its power and transmission customers. For facilities added by the Network Customer subsequent to July 13, 2007, the Network Customer shall receive credit for such transmission facilities added if such facilities are integrated into the operations of the Transmission Provider's facilities; provided however, the Network Customer's transmission facilities shall be presumed to be integrated if such transmission facilities, if owned by the Transmission Provider, would be eligible for inclusion in the Transmission Provider's annual transmission revenue requirement as specified in Attachment H. Calculation of any credit under this subsection shall be addressed in either the Network Customer's Service Agreement or any other agreement between the Parties.