

Substation	Interconnection Description Exhibit References
Boulder Terminal	Exhibits COB-0020 at 1-4, 8-18, 80-81; COB-0022
Gunbarrel	Exhibits COB-0020 at 1-4, 70-79, 90-91; COB-0023
NCAR	Exhibits COB-0020 at 1-4, 19-30, 82-83; COB-0024
Leggett	Exhibits COB-0020 at 1-4, 31-44, 84-85; COB-0024
Sunshine	Exhibits COB-002 at 1-4, 58-69, 88-89; COB-0026
Wastewater Treatment Plant	Exhibits COB-0021, COB-0027

The City further requests that the Commission direct Xcel to establish the requested physical interconnections with the City, with the City’s requested in-service date of January 1, 2024, unless the scheduled referendum vote on the proposed acquisition of Xcel’s distribution system determines that the municipalization effort should not proceed.

The City submits this Application pursuant to Sections 210 and 212 of the Federal Power Act (16 U.S.C. §§ 824i and 824k) and Rules 204 and 206 of the Commission’s Rules of Practice and Procedure (18 C.F.R. §§ 385.204 and 385.206). This Application is supported by the accompanying testimony of Steven D. Catanach, P.E., Boulder’s Director of Climate Initiatives (Exhibits COB-0001 through COB-0017), and Thomas A. Ghidossi, P.E., President of Exponential Engineering Company of Fort Collins, Colorado, the City’s principal consulting engineer (Exhibits COB-0018 through COB-0027). The City’s proposal meets all applicable requirements under Sections 210 and 212 of the FPA. As described below, the City has made every effort to secure reasonable, non-discriminatory interconnection arrangements with Xcel,

while Xcel has interposed unreasonable objections and sought to impose unreasonable costs on the City's efforts to establish those interconnections, and for two substations, has prohibited interconnection, contrary to the findings of Xcel's own Facility Study Reports.

I. INTRODUCTION AND SUMMARY

The City submits this Application in response to various communications from Xcel's executive management and counsel during October and November 2019, disclaiming and disavowing its obligation to interconnect with the City on just, reasonable and non-discriminatory terms and conditions, while asserting that Xcel was entitled to invoke a self-defined "public interest" in refusing to implement studied and approved interconnection arrangements. Because of those communications and related impediments interposed in the interconnection process, as described in greater detail below, the City requests in this Application that the Commission direct Xcel to interconnect with the City pursuant to interconnection arrangements studied and pronounced acceptable by Xcel in its System Impact Study and Feasibility Study Reports issued between October 2018 and August 2019.

On January 9, 2018, the City submitted a transmission-to-load interconnection request to Xcel, requesting interconnection at six substations that serve the electric distribution system within the City of Boulder from the Xcel transmission system. The City submitted its request at the direction of the Colorado Public Utilities Commission ("PUC"), in a proceeding that the PUC had concluded was a prerequisite to the City's use of its eminent domain power to acquire that distribution system. In

response to the City's request and at the City's expense, Xcel (through its affiliate PSCo) completed consolidated System Impact Studies (Exhibit COB-0020 and COB-0021) and separate Facilities Studies for the six interconnections that are the subject of this Application (Exhibits COB-0022 through COB-0027). Xcel conducted all of these studies, and its study reports, in accordance with its *Interconnection Guidelines for Transmission Interconnected Customer Loads* ("*Interconnection Guidelines*"), "Good Utility Practice and the engineering and operating principles, standards, guidelines and criteria of [Xcel] . . . [and] the Regional Reliability Council of which the Transmission Provider is a member."² The City accepted Xcel's reports (Exhibit COB-007, COB-0010) in August 2019 and moved forward with incorporating the accepted interconnection schemes at each of the substations into the negotiations for a formal Interconnection Agreement which had been ongoing since April 2018.

On October 15, 2019, PSCo's President wrote to Boulder's City Manager and City Attorney, stating that Xcel would decline to proceed with the studied and accepted interconnection arrangements at two of the six substations:

While Public Service and the City of Boulder have worked diligently together through a transmission to load type of interconnection process tailored for the City at its request, the considerations required to arrive at decisions on whether to sell substation assets go well beyond the technical engineering-related analysis found in the System Impact Studies and Facilities Studies; such considerations include a comprehensive evaluation of risks to facilities, customers, personnel, the Company and the grid.³

² Exhibit COB-0005 at 2.

³ Exhibit COB-0012 at 2.

Subsequently, on November 25, 2019, Xcel's counsel wrote to Boulder's City Attorney asserting that the entire transmission-to-load interconnection study process in which the City and Xcel had been engaged since January 9, 2018 was essentially a nullity, asserting incorrectly that:

The City is not in a load to transmission interconnection process and will not be in that process unless and until it officially submits a request pursuant to the OATT for transmission service.⁴

Also on November 25, 2019, Xcel executive management attempted to downgrade the significance of the transmission-to-load System Impact and Facilities Studies that Xcel had performed between April 2018 and August 2019 at the City's cost, stating that "those studies were limited to a technical engineering-related analysis of how separate entities could be positioned within the respective substations" but somehow failed to evaluate the "public interest."⁵ As a result of these statements and other conduct by Xcel attempting to disclaim its obligations to provide just, reasonable and non-discriminatory interconnection service under the transmission-to-load interconnection process, Boulder submits this Application under FPA Sections 210 and 212 to protect its right to just, reasonable and non-discriminatory interconnection service.

⁴ Exhibit COB-0016.

⁵ Exhibit COB-0017 at 1-2.

II. PLEADINGS AND OTHER COMMUNICATIONS

Pleadings and other communications concerning this proceeding should be directed to the following persons on behalf of the City. The persons whose names are followed by an asterisk (*) should be included in the Official Service List.

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III. BACKGROUND

As the Commission is aware, Boulder has been engaged in efforts to explore the feasibility of a municipally owned and operated electric utility since November 2011,⁶ when its voters approved an amendment to Boulder's Home Rule Charter providing authority to establish, acquire, erect, maintain and operate a municipal electric utility. Boulder's current application for an interconnection order pursuant to FPA Section 210 grows out of proceedings before the PUC. Those proceedings, in

⁶ Boulder and Xcel have each initiated a proceeding before this Commission seeking declaratory relief relating to aspects of Boulder's efforts to establish its municipal electric utility and to acquire Xcel facilities. *See Public Service Co. of Colorado*, 149 FERC ¶ 61,228 (2014) (applicability of FPA Section 203 to involuntary transfers of facilities subject to the jurisdiction of the Commission); *City of Boulder, Colorado*, 144 FERC ¶ 61,069 (2013) (effect of transitional power supply arrangements on potential stranded cost obligations).

turn, resulted from the PUC's assertion of authority to determine which distribution assets Boulder could acquire through the exercise of its eminent domain power.

A, The Transmission-to-Load Interconnection Process

In 2015, Boulder filed an application with the PUC seeking approval for the transfer, voluntary or involuntary, of certain Xcel assets currently used to provide service to the City (the "Asset Transfer Proceeding").⁷ Boulder made its application pursuant to §40-5-105, Colo. Rev. Stat. and PUC Rule 3104.⁸ In the Asset Transfer Proceeding, the PUC's September 14, 2017 Decision⁹ directed Boulder to pursue a transmission-to-load interconnection process subject to this Commission's jurisdiction to resolve physical interconnection issues inside the fence-line of six affected Xcel substations. The PUC's Decision concluded that "[i]t is reasonable for [Xcel] and Boulder to rely upon the transmission load interconnection request process, and also the NITS process, to attempt to resolve the required configurations and ownership arrangements inside the substations."¹⁰

⁷ PUC Proceeding No. 15A-0589E, *In the Matter of Application of the City of Boulder, Colorado for Approval of the Proposed Transfer of Assets from Public Service Co. of Colorado*. On October 28, 2019, the PUC issued its ultimate ruling in the Asset Transfer proceeding in Decision No. C19-0874 -- Decision: (1) Finding Conditions Met of Decision No. C17-0750; (2) Approving Designation of Assets Outside Substations for Transfer; (3) Denying Outstanding Filings as Moot; and (4) Closing Proceeding. Exhibit COB-0011.

⁸ 4 Colorado Code of Regulations ("CCR") 723-3104.

⁹ PUC Proceeding No. 15A-0589E, *In the Matter of Application of the City of Boulder, Colorado for Approval of the Proposed Transfer of Assets from Public Service Co. of Colorado*, Decision No. C17-0750 (September 14, 2017). Exhibit COB-0003.

¹⁰ *Id.* at ¶ 129.

On October 28, 2019, the PUC issued a final decision in the Asset Transfer Proceeding, finding the City had met the conditions of the September 14, 2017 Decision for the transfer of assets outside of the substations.¹¹ In that decision, the PUC also required that, prior to the Cut-Over Date,¹² “Boulder and Public Service shall file, pursuant to §40-5-105, C.R.S., an application in a separate proceeding for final Commission approval of the transfer of Public Service’s assets to Boulder.”¹³

B. Transmission-to-Load Interconnection Study Process Overview

On January 9, 2018, Boulder initiated the transmission to load interconnection process by submitting its interconnection request, in accordance with Xcel’s published business practices,¹⁴ which covered interconnection at six Xcel substations currently

¹¹ PUC Proceeding No. 15A-0589E, *In the Matter of Application of the City of Boulder, Colorado for Approval of the Proposed Transfer of Assets from Public Service Co. of Colorado*, Decision No. C19-0874 (October 28, 2019). Exhibit COB-0011.

¹² In its September 14, 2017 Decision C17-0750, the PUC defined the “Cut-Over Date” as the date after implementation of the separation plan separating the existing system into two separate systems when “Boulder begins to operate its municipal electric utility.” ¶28. The City and Xcel further defined the “Cut-Over Date” in the Agreement for Payment of Costs dated October 24, 2018, between the City and Xcel required as a condition of the 2017 PUC Decision, through which the City pays Xcel’s costs for separation and posts security for construction:

Cut-Over Date refers to the date when the separation of the Boulder System from the Xcel System is complete, so that (1) Xcel’s System has the same safety, reliability and effectiveness as it did prior to the commencement of separation activities, (2) the Xcel System and the Boulder System can each be operated separately from the other, and (3) Boulder is willing and able to begin serving all of its customers.

¹³ PUC Decision D19-0874 at ¶ 70.

¹⁴ Available at <https://www.transmission.xcelenergy.com/Interconnections> (last visited January 30, 2020).

servicing the retail load located within the City of Boulder. Boulder and Xcel subsequently negotiated and filed with this Commission non-conforming agreements for system impact studies,¹⁵ and for facilities studies,¹⁶ for interconnection at six substation locations, as more fully described below.

On October 31, 2018, Xcel provided Boulder a Consolidated System Impact Study Report (Exhibit COB-0020) (the “Consolidated SIS Report”) that it had completed at the City’s sole expense for interconnection at six Xcel substations that currently serve load within the City of Boulder. The Consolidated SIS Report stated that it had been conducted in accordance with Xcel’s *Interconnection Guidelines for Transmission Interconnected Customer Loads* (the “*Interconnection Guidelines*”), as well as “consistent with [Xcel’s] standards applicable to existing substations and Good Utility Practice (as such term is defined in the Xcel Energy Operating Companies OATT)” (Exhibit COB-0020 at 3-4). On December 19, 2018, Xcel provided an additional System Impact Study Report for a City substation to be interconnected with a Xcel 230 kV transmission line in the vicinity of the City’s Wastewater Treatment Plant (Exhibit COB-0021), as an alternative to one of the substation

¹⁵ Docket No. ER18-1502-000 – *Public Service Co. of Colorado* (unreported letter order issued June 19, 2018). The Transmission-to-Load Interconnection System Impact Study Agreement, dated April 30, 2018, acknowledged that Boulder’s application was complete as required by the Tariff and that Boulder had not yet requested transmission service (Exhibit COB-0005 at 1). Boulder and Xcel executed a second System Impact Study Agreement for the review of an alternative interconnection configuration to one substation (Exhibit COB-0006), which was filed in Docket No. ER19-141-000 – *Public Service Co. of Colorado* (unreported letter order issued December 10, 2018).

¹⁶ Docket No. ER19-1784-000 – *Public Service Co. of Colorado* (unreported letter order issued June 20, 2019).

interconnections reviewed in the Consolidated SIS Report. The December 19, 2018 System Impact Study Report for the Wastewater Treatment Plant interconnection also stated that it had been conducted in accordance with Xcel's *Interconnection Guidelines for Transmission Interconnected Customer Loads* (the "*Interconnection Guidelines*"), as well as "consistent with [Xcel's] standards applicable to existing substations and Good Utility Practice (as such term is defined in the Xcel Energy Operating Companies OATT)" (Exhibit COB-0021 at 2).

The City accepted the results of the Consolidated SIS Report for five substations (Exhibit COB-0007) and the results of the System Impact Study Report on an alternative site (Exhibit COB-0008). Following these acceptances, on May 6, 2019 Boulder and Xcel entered into a non-conforming Facility Study and Detailed Engineering Design Agreement (Exhibit COB-0009) for the six substations Xcel analyzed. The Agreement was accepted for filing by the Commission on June 20, 2019, by unpublished letter order in Docket No. ER19-1784-000. This Agreement also provided for Xcel to prepare detailed engineering designs for each substation in order to estimate the interconnection construction costs to inform the Boulder voters of the costs of municipalization. On August 16, 2019, Xcel submitted, and the City accepted, completed Facilities Study Reports for interconnections at six substations (Exhibits COB-0010 and COB-0022 through COB-0027). The Facilities Study Reports provided for Boulder's acquisition of distribution assets inside three substations and construction of three new distribution substations.¹⁷ On October 25,

¹⁷ Xcel would not allow co-location of Boulder distribution with Xcel distribution at the three substations from which Xcel would continue to serve retail customers.

2019, Xcel accepted a \$2.6 million letter of credit from the city to prepare detailed engineering design for each of the substations.¹⁸

C. Xcel Disavows Its Open Access Obligations for Interconnection

On August 16, 2019 the City accepted the Facilities Studies (Exhibit COB-0010). Between April 2019 and November 12, 2019 Boulder and Xcel exchanged multiple draft agreements to address construction, maintenance, operations, property use and facilities within the substations along with draft Cost Responsibility Tables. During these negotiations, Xcel began asserting positions that are at odds with its Open Access obligation to provide non-discriminatory interconnection service on just and reasonable conditions. These assertions, which are discussed in detail in the sections below and the attached testimony of Mr. Catanach and Mr. Ghidossi, are inconsistent with the results of Xcel's own studies and contravene Commission precedent. For example, in an October 15, 2019 letter, Xcel announced it was unwilling to allow Boulder to interconnect at the Boulder Terminal and Gunbarrel Substations (Exhibit COB-0012). Xcel's current position stands in direct contrast to the results of its own Studies and Reports which established the feasibility and safety of those interconnections (Exhibit COB-0020 at 8-18, 70-81, 90-91; Exhibit COB-0021; Exhibit COB-0022).

Xcel additionally asserts that “[t]he City is not in a load to transmission interconnection process and will not be in that process unless and until it officially submits a request pursuant to the OATT for transmission service.” (Exhibit COB-

¹⁸ Exhibit COB-0001, at 14:9-11.

0016, at 1). This assertion is facially inconsistent with the Commission's settled view that interconnection and transmission are separate services, which customers are free to secure separately under a transmission owner's FPA Section 205 and 206 open access obligations.¹⁹ It is also inconsistent with Xcel's repeated recognition, in pleadings before this Commission as well as in agreements with the City, that Boulder has submitted a complete Transmission-to-Load Interconnection Application.²⁰ Xcel has also attempted to restrict interconnection on the basis of its interpretation of what is in the "public interest" (Exhibits COB-0012 and COB-0017). As part of the negotiations on Cost Responsibility Agreements Xcel has attempted to allocate to Boulder the costs of network upgrades, maintenance, and repairs to Network Transmission facilities in contravention of the Commission's cost allocation principles.²¹

¹⁹ See, e.g., *E. Ky. Pwr. Coop., Inc.*, 115 FERC ¶ 61,347 at P 14 (2006) ("We reject TVA's contention that, in order for Commission-ordered interconnection to be beneficial, they must be coupled with transmission service"); *Laguna Irrig. Dist.*, 95 FERC ¶ 61,305 at 62,038 (2001) ("Laguna's application requested an interconnection to enable Laguna to provide electric service to those customers, and that is what the Commission granted. Nothing in our interconnection order requires transmission service"); *Tennessee Pwr. Co.*, 90 FERC ¶ 61,238 at 61,761 (2000) ("However, customers also have the right under the pro forma tariff to request the interconnection component of transmission service separately from the delivery component, and when this occurs, the pro forma tariff procedures continue to apply").

²⁰ See e.g. Transmission-to-Load Interconnection Facilities Study and Detailed Engineering Design Agreement, Exhibit COB-0009 at 1 (recognizing Agreement is "pursuant to a Transmission-Load Interconnection Application submitted by the City on January 9, 2018"); Docket No. ER18-1502-000 – *Public Service Co. of Colorado*, Transmittal Letter at 2 ("the City submitted an Application for Transmission-to-Load Interconnection Service...under the Xcel Energy Operating Companies Transmission-to-Load Interconnection Guidelines, Version 7.0...as posted on the Xcel Energy Transmission website").

²¹ Exhibit No. COB-0018 at 15:13-16:11.

Xcel's efforts to disavow its interconnection obligations as a transmission-owning utility, and to impede the City's efforts to secure transmission-to-load interconnection on just and reasonable terms, have increased the City's costs of establishing interconnection and unreasonably delayed the City's efforts to make a final decision concerning the implementation of its proposed municipal electric utility. These assertions by Xcel threaten the efficacy and purpose of the transmission-to-load interconnection process. For this reason, Boulder believes that the Commission's vindication of that process under Section 210 has become both necessary and appropriate.

D. Description of the City

Boulder is located 35 miles northwest of Denver and has a population of just over 100,000 residents. As of January 2018, the electric distribution system within Boulder served approximately 49,239 customers with a summer peak load of approximately 237 MW, not including reserve margin. The customer base consists of approximately 85 percent residential and small commercial customers, and 15 percent large commercial/industrial customers.

Boulder is an "electric utility" within the meaning of Section 3(22) of the FPA (16 U.S.C. § 796(22)), and is eligible to apply to the Commission for an order requiring interconnection under Section 210(a)(1) of the FPA (16 U.S.C. § 824i(a)(1)). Boulder owns eight small hydroelectric facilities, which have total installed capacity of approximately 13,648 kW. As explained in greater detail in the testimony of Steven D. Catanach (Exhibit COB-0001 at 4:16-5:8) each of those facilities holds a conduit

exemption from Commission licensing under Part I of the FPA, and most have been certified as qualifying small power producers under the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. § 824a-3). Boulder sells the output of its Boulder Canyon, Sunshine, Orodell, Kohler, and Maxwell hydroelectric facilities to Tri-State Generation and Transmission Association, Inc., under a power purchase agreement (“PPA”) that currently extends through May 31, 2028. Boulder sells the output of its Betasso, Silver Lake, and Lakewood hydroelectric facilities to Xcel under a PPA that currently extends through December 17, 2022.

E. Description of Xcel

Xcel is a wholly owned utility operating subsidiary of Xcel Energy Inc. Xcel is a vertically integrated electric utility and, *inter alia*, owns and operates transmission facilities in the State of Colorado, and electric distribution facilities located, *inter alia*, within the City of Boulder. Xcel provides wholesale transmission service, *inter alia*, pursuant to the Xcel Energy Operating Companies Open Access Transmission Tariff (“Xcel Energy OATT”).

F. Description of Requested Interconnections

Boulder requests that this Commission direct Xcel, pursuant to FPA Section 210, to implement the six Transmission-to-Load Interconnections Xcel studied, modified, and found acceptable in the Transmission-to-Load Interconnection study process. That study process, in turn, resulted in Xcel’s issuance, and the City’s acceptance, of final Facilities Study Reports for each of the six Transmission-to-Load Interconnections on August 16, 2019 (Exhibits COB-0022 through COB-0027). Those

six Transmission-to-Load Interconnections are described in detail in those Facilities Study Reports and are summarized below. The Boulder Terminal Substation and Gunbarrel Substation requested interconnections are the present focus of Xcel's efforts to disavow its Open Access obligations for transmission-to-load interconnection (Exhibits COB-0012, COB-0016 and COB-0017).

The City requests a Commission Order, pursuant to FPA Section 210, directing interconnection at all six substations listed below, in order to ensure that the transmission-to-load interconnection process is not further undermined:

- 1. Boulder Terminal:** Boulder requests that the Commission direct Xcel to implement the interconnection described in the System Impact Study report (Exhibit COB-0020 at 1-4, 8-18, 80-81), as modified by the Facilities Study report for that interconnection (Exhibit COB-0022).
- 2. Gunbarrel:** Boulder requests that the Commission direct Xcel to implement the interconnection described in the System Impact Study (Exhibit COB-0020 at 1-4, 70-79, 90-91), as modified by the Facilities Study report for that interconnection (Exhibit COB-0023).
- 3. NCAR:** Boulder requests that the Commission direct Xcel to implement the interconnection described in the System Impact Study (Exhibit COB-0020 at 1-4, 19-30, 82-83), as modified by the Facilities Study report for that interconnection (Exhibit COB-0026).
- 4. Leggett:** Boulder requests that the Commission direct Xcel to implement the interconnection at a newly constructed, City-built and City-owned substation adjacent to Xcel's existing Leggett Substation, described in the System Impact Study (Exhibit COB-0020 at 1-4, 31-44, 84-85), as modified by the Facilities Study report for that interconnection (Exhibit COB-0025).
- 5. Sunshine:** Boulder requests that the Commission direct Xcel to implement the interconnection at a newly constructed,

City-built and City-owned substation adjacent to Xcel's existing Sunshine Substation, described in the System Impact Study (Exhibit COB-0020 at 1-4, 58-69, 88-89), as modified by the Facilities Study report for that interconnection (Exhibit COB-0024).

6. Wastewater Treatment Plant:

Boulder requests that the Commission direct Xcel to implement the interconnection at a newly constructed, City-built and City-owned substation, described in the December 19, 2019 System Impact Study (Exhibit COB-0021), as modified by the Facilities Study report for that interconnection (Exhibit COB-0027).

Xcel has announced that it would not proceed with the studied and accepted interconnection arrangements at Boulder Terminal and Gunbarrel substations.²² Xcel asserts that it “does not believe” that interconnections that Xcel previously concluded satisfy the requirements of Xcel’s *Interconnection Guidelines*, “Good Utility Practice and the engineering and operating principles, standards, guidelines and criteria of [Xcel] . . . [and] the Regional Reliability Council of which the Transmission Provider is a member”²³ are “in the public interest.”²⁴ Currently, Xcel has rejected the conclusions of its own studies concerning the accepted interconnection arrangements at Boulder Terminal and Gunbarrel substations. However, Boulder believes Xcel is likely to similarly disclaim the study results at the remaining four substations (Sunshine, NCAR, Leggett and Wastewater Treatment Plant). To avoid

²² Exhibits COB-0012 (October 15, 2019 Letter), COB-0017 (November 25, 2019 Letter).

²³ Exhibit COB-0020 at 3-4.

²⁴ Exhibit COB-0012 at 3-4.

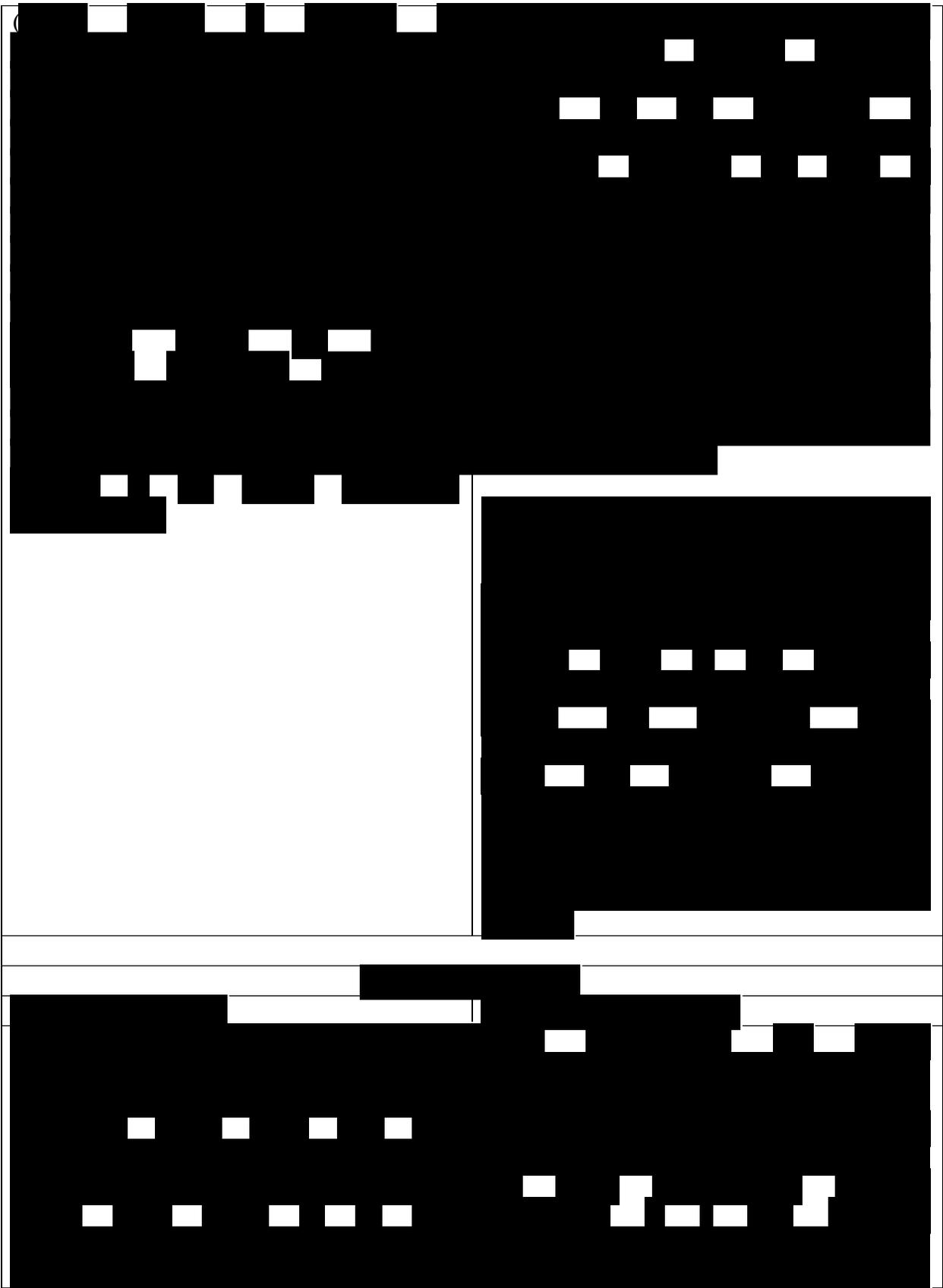
further delay and multiple 210 Applications, Boulder requests that the Commission order interconnection at all six substations.

G. The Completed Study Process

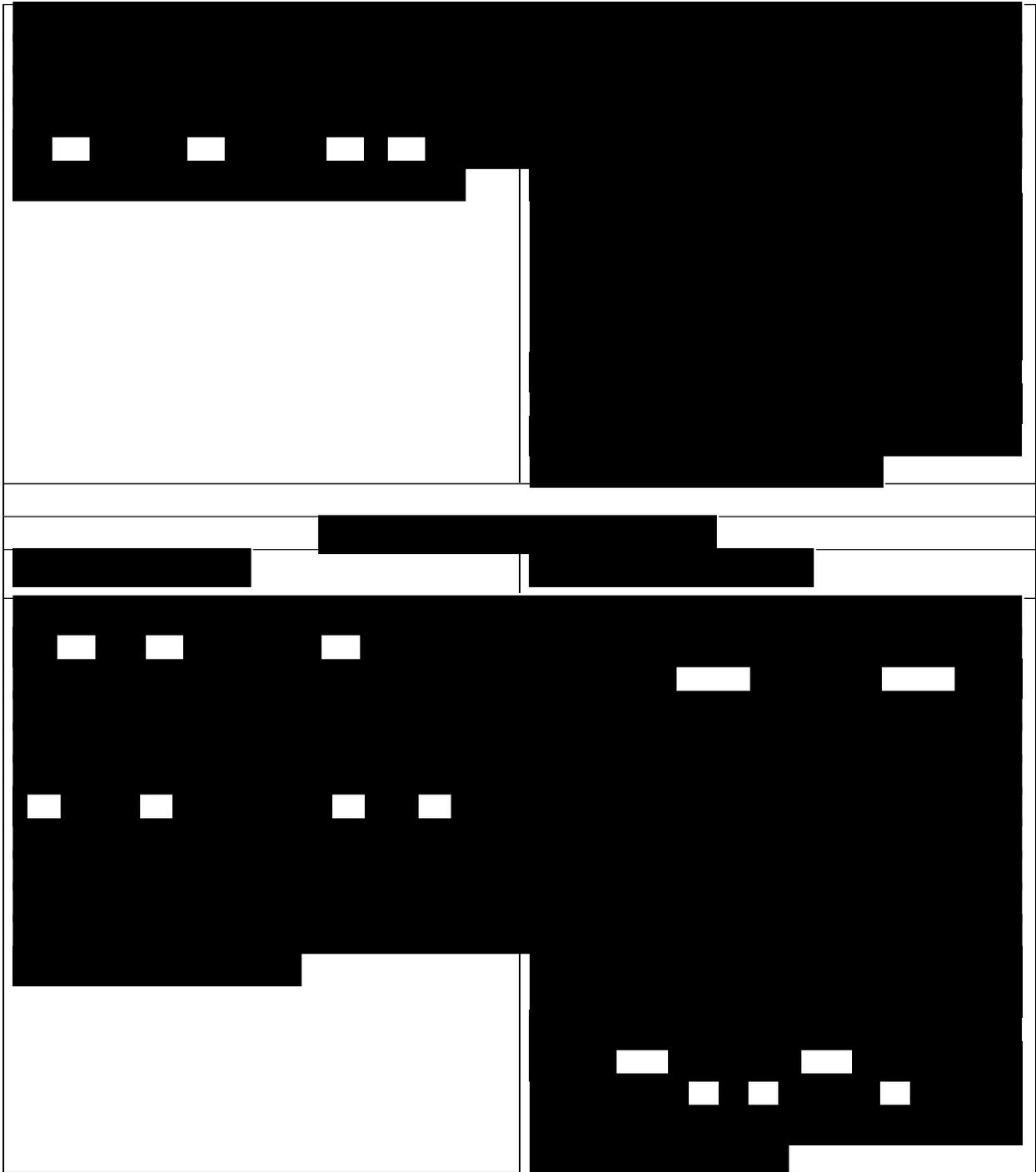
The Transmission to Load Interconnection System Impact Study Agreement acknowledged that “the [City’s] Application is complete under the applicable provisions of the Tariff and the Xcel Energy Operating Companies Transmission-to-Load Interconnection Guidelines, Version T (“T-L Guidelines”)”²⁵ and (2) committed either (i) to determine how Xcel and City facilities would co-locate in the footprint of the current Xcel substations, or (ii) to provide alternative scenarios for establishing the Transmission-to-Load Interconnection requested by Boulder.

Xcel performed System Impact Studies (SIS) for the six existing substations and the one new substation. Xcel’s SIS studies provided a greater level of detail than typical studies, in view of the fact that much of the anticipated work would be within existing Xcel substations. Xcel conducted the SIS and the Facilities Study consistent with Xcel’s standards applicable to existing substations and Good Utility Practice (as such term is defined in the Xcel Energy Operating Companies Joint OATT). Boulder reviewed the SIS reports and provided minor comments for Xcel’s consideration. Upon receipt of Xcel’s Consolidated SIS Report (Exhibit COB-0020), Boulder accepted the Report’s conclusions and proposed interconnection schemes for five of the six interconnections studied (Exhibit COB-0007) and requested that Xcel proceed with

²⁵ Exhibit COB-0005 at 1; Exhibit COB-0006 at 1.



<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>[REDACTED]</p>	
<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>[REDACTED]</p>	
<p>[REDACTED]</p>	<p>[REDACTED]</p>



[END CEII INFORMATION]

**IV. THE COMMISSION SHOULD GRANT THE
REQUEST FOR INTERCONNECTION
PURSUANT TO FPA SECTIONS 210 AND 212**

Boulder submits this Application to the Commission in order to restore and ensure compliance with the Commission's open access principles in this transmission-to-load interconnection process. The City spent twenty months and in excess of \$370,000 in direct payments to Xcel participating in a detailed and exacting transmission-to-load interconnection study process (COB-0001 at 10:20-22), professionally conducted by Xcel's engineering staff "in accordance with" Xcel's own *Interconnection Guidelines*, and "consistent with [Xcel's] standards applicable to existing substations and Good Utility Practice (as such term is defined in the Xcel Energy Operating Companies OATT)" (Exhibit COB-0020 at 3-4). Following Xcel's delivery of the final Facilities Study reports in August 2019, and after the City had delivered and Xcel accepted a \$2.6 million letter of credit compensating Xcel for detailed engineering design work on the six interconnection schemes supported by the 20-month study process, Xcel's executive management and outside counsel disavowed and disparaged the significance of the interconnection study process through a series of communications in October and November 2019.

The positions asserted by Xcel executive management and counsel undermine the integrity, value and effectiveness of the interconnection study process. They substantially impair the value of the City's significant investment in that process to date and mock the principles on which the Commission's open access regime depends. Boulder requests that the Commission issue its Order, pursuant to FPA Section 210,

directing Xcel to implement the interconnection schemes studied and found acceptable by both parties in the transmission-to-load interconnection process, in order to protect the integrity and functionality of that process.

A. Xcel Efforts to Disavow and Undermine the Interconnection Process

On October 15, 2019, Public Service Company of Colorado President Alice Jackson and Senior Vice President, Transmission, Michael Lamb wrote to Boulder City Manager Jane Brautigam and City Attorney Tom Carr (Exhibit COB-0012) (the “October 15 Letter”). The October 15 Letter asserted first that – notwithstanding the conclusions of the interconnection study process concluded two months earlier – Xcel “does not believe” that a key feature of the interconnection scheme proposed and reviewed in the interconnection study process, the sale of distribution facilities located inside Boulder Terminal Substation to the City, “is in the public interest” (Exhibit COB-0012 at 2-3). Ignoring the conclusions of Xcel’s own System Impact Study (Exhibit COB-0020 at 8) and Facilities Study Report (Exhibit COB-0022), the October 15 Letter instead recycled assertions from the July-August 2017 testimony of two Xcel witnesses in the Asset Transfer Proceeding (Exhibit COB-0012 at 3 n. 6-8). This testimony pre-dates the September 14, 2017 PUC Decision C17-0750 which directed the City and Xcel to use the transmission-to-load interconnection process to resolve substation issues (Exhibit COB-0003 at ¶¶ 128-132). Xcel’s stated position disavows and contradicts Xcel’s own October 31, 2018 System Impact Study Report (Exhibit COB-0020 at 1-4, 8-18, 80-81) and August 16, 2019 Facilities Study Report (Exhibit COB-0022), which found these two interconnections acceptable to Xcel.

The later, and carefully documented, study results thoroughly discredit the assertions advanced in the October 15 Letter (Exhibit COB-0012 at 3 n. 7) based on pre-filed PUC testimony in June and July 2017 concerning the Boulder Terminal Substation interconnection scheme. For example, the October 15 Letter asserts that “the transmission facilities at Boulder Terminal are located, in part, between the distribution transformers creating a yard that is extremely congested” (Exhibit COB-0012 at 2-3). In contrast, Xcel’s System Impact Study concluded with respect to Boulder’s proposed interconnection at Boulder Terminal Substation that “the COB proposal for BTER is acceptable to [Xcel]” with specified modifications that the City subsequently accepted (Exhibit COB-0020 at 8). The System Impact Study specifically defines lines of demarcation and provides a general arrangement drawing showing the ownership of each of the existing and new facilities at Boulder Terminal Substation and how the property would be shared according to the proposed-and-accepted demarcation (Exhibit COB-0020 at 8-9).²⁷

The October 15 Letter also refused to proceed with interconnection at Xcel’s Gunbarrel Substation (Exhibit COB-0012 at 3-4). This refusal overlooked the fact

²⁷ The October 15 Letter’s complaints that “space around critical equipment is insufficient to complete a replacement without creating a high potential for contact with Xcel equipment; in the event a transformer fails catastrophically, there is a potential for damage to other equipment by heat, fire, and/or oil spray flow; there is less than 50 [feet] of spacing from the edge of the distribution transformer oil containment to Xcel critical equipment; and there is no room to install a firewall” (Exhibit COB-0012 at 3 n. 6) all affect Xcel’s operation of Boulder Terminal Substation currently – prior to any interconnection with Boulder – and there is no indication that the interconnection scheme proposed by Boulder and accepted by Xcel with modifications agreed to by Boulder exacerbates this situation in any way.

that Xcel has previously permitted another utility – Tri-State Generation & Transmission Association, Inc. – to interconnect at Gunbarrel substation. The absence of any principled distinction between that interconnection and Boulder’s proposed acquisition of existing Xcel equipment that was accepted with modifications by Xcel in its System Impact Study (Exhibit COB-0020 at 1-4, 70-79, 90-91), as modified by the Facilities Study report for that interconnection (Exhibit COB-0023), indicates discrimination in Xcel’s refusal to allow Boulder to interconnect at Gunbarrel Substation.

In addition, the rationales advanced by the October 15 Letter for refusal to proceed with interconnection at Gunbarrel Substation are redolent with pretext. Thus, Xcel’s central contention is that the construction process for a Boulder interconnection at Gunbarrel would involve subjecting a large retail customer served from that substation to a single supply feed during construction (Exhibit COB-0012 at 3-4). This “concern” goes unmentioned in the Consolidated SIS Report (Exhibit COB-0020 at 1-4, 70-79, 90-91), as modified by the Facilities Study report for that interconnection (Exhibit COB-0023). On November 25, 2019, Xcel refused the City’s request to examine “the more detailed review of the required loss of transmission service redundancy outages” that Xcel stated in the October 15 Letter “was performed” – presumably after the System Impact Study and Facilities Study Reports were completed – on which the October 15 Letter claimed to have relied for this conclusion (Exhibit COB-0017). Xcel stated that the City’s request “reads as a request for discovery in a prelude to another adjudicatory proceeding(s)” and “the

Company is not interested in responding to such” (Exhibit COB-0017 at 2). All of this dialogue ignores the more central fact that the large retail customer whose redundancy of supply is a matter of such concern to Xcel is located within the corporate limits of the City of Boulder and would be served at retail by Boulder if the municipalization project proceeds.

Finally, the November 25, 2019 communications from Xcel cast grave doubt on the efficacy of the interconnection study process on which the City had just spent twenty months and several million dollars.²⁸ First, Xcel President Alice Jackson and Senior Vice President, Transmission, Michael Lamb, wrote to Steven D. Catanach, Boulder’s Director of Climate Initiatives, stating that the interconnection study processes “were limited to a technical engineering-related analysis of how separate entities could be positioned within the respective substations” (Exhibit COB-0017 at 1-2). That characterization is fundamentally at odds with both this Commission’s views on seriousness of the interconnection study process, and Xcel’s own recitation in its System Impact and Facilities Study reports and the agreements governing those reports of the standards and considerations governing its System Impact and Facilities Studies of the interconnections requested in this Application. Second, Xcel’s outside counsel wrote to Boulder’s City Attorney in response to his inquiries concerning the status of a draft of a Co-Location Agreement under negotiation between Xcel and the City, asserting (Exhibit COB-0016, at 1):

²⁸ These costs include not just Xcel’s direct billing for conducting the System Impact Studies and Reports, but also the costs associated with Xcel’s engineering work to evaluate the separation plan and the City’s internal and consulting costs.

The City is not in a load to transmission interconnection process and will not be in that process unless and until it officially submits a request pursuant to the OATT for transmission service. The co-location agreement and the other substation-related activities are part of the accommodations Public Service has made to help Boulder evaluate municipalization. These activities are not substitutes for and do not constitute compliance with OATT requirements.

This assertion is facially inconsistent with the Commission's settled view that interconnection and transmission are separate services, which customers are free to secure separately under a transmission owner's FPA Section 205 and 206 open access obligations.²⁹ It is also inconsistent with the plain language of the study agreements between the City and Xcel (Exhibits COB-0005, COB-0006, and COB-0009) and the System Impact and Facilities Study reports for which the City has compensated Xcel (Exhibits COB-0020 through COB-0027).

In summary, Xcel's efforts to disavow the transmission-to-load interconnection process have reached a point requiring Commission action to vindicate the integrity and effectiveness of that process. The Commission has not hesitated to use FPA Section 210 to support the specific need that Boulder has in this case for accurate and

²⁹ See, e.g., *E. Ky. Pwr. Coop., Inc.*, 115 FERC ¶ 61,347 at P 14 ("We reject TVA's contention that, in order for Commission-ordered interconnection to be beneficial, they must be coupled with transmission service"); *Laguna Irrig. Dist.*, 95 FERC ¶ 61,305 at 62,038 ("Laguna's application requested an interconnection to enable Laguna to provide electric service to those customers, and that is what the Commission granted. Nothing in our interconnection order requires transmission service"); *Tennessee Pwr. Co.*, 90 FERC ¶ 61,238 at 61,761 ("However, customers also have the right under the pro forma tariff to request the interconnection component of transmission service separately from the delivery component, and when this occurs, the pro forma tariff procedures continue to apply").

reliable information to guide its future decision making on how best to proceed with planned system development.³⁰ It is for this reason that Boulder submits this Application.

**B. This Application Is Appropriately
Made under FPA Sections 210 and 212**

Section 210(a) of the FPA provides in relevant part that:

Upon application of any electric utility . . . the Commission may issue an order requiring—

(A) the physical connection of . . . the transmission facilities of any electric utility, with the facilities of such applicant.

As outlined above, since January 2018, Boulder has engaged in the transmission-to-load interconnection process contemplated by the Colorado PUC's Decision C17-0750, outlined in Xcel's *Interconnection Guidelines* and the non-conforming study agreements filed with the Commission that have resulted in the System Impact Studies and Facilities Studies completed by Xcel at the City's cost. Since Xcel's delivery of its Facilities Study reports in August 2019, those efforts have approached impasse as the result of Xcel's interposition of objections to interconnection that are (1) at odds with earlier conclusions as to the feasibility of interconnection, or (2) pretextual, or (3) premised on an erroneous characterization of the status of the transmission-to-load interconnection process, or (4) discriminatory. Because the obligation to provide interconnection service – including transmission-to-load interconnection service – is an aspect of Xcel's obligation under

³⁰ *American Municipal Power-Ohio v. Dayton Pwr. & Light Co.*, 67 FERC ¶ 61,373 at 62,273-62,274, *reh'g denied*, 68 FERC ¶ 61,133 at 61,645 (1994).

FPA Sections 205 and 206 to provide non-discriminatory, open access to its transmission system, this Commission is the appropriate forum for resolving the objections that Xcel has attempted to interpose and a Section 210 interconnection order is the appropriate path for that resolution.

C. This Application Meets All Requirements for Interconnection under FPA Sections 210 and 212

1. The City Is Eligible to Apply for an Interconnection Order

As described above, Boulder owns eight small hydroelectric facilities and sells the energy produced by those facilities to Tri-State Generation & Transmission Association, Inc. and to Xcel affiliate Public Service Co. of Colorado under separate power purchase agreements. The City is thus an “electric utility” within the meaning of Section 3(22) of the FPA (16 U.S.C. § 796(22)) and is eligible to apply for an interconnection order under FPA Section 210(a) (16 U.S.C. § 824i(a)).

In addition, the City will either own the distribution facilities for which it seeks interconnection with Xcel’s transformation and transmission facilities by the time the interconnection sought in this application is required, or it will inform the Commission that the City’s scheduled referendum vote has resulted in determination not to proceed with the municipalization project. The requested interconnection thus involves facilities eligible for an interconnection order under FPA Section 210(a)(1)(A).³¹ Finally, an order by this Commission directing transmission to load interconnection between Xcel’s transmission and

³¹ *Laguna Irrig. Dist.*, 95 FERC ¶ 61,305 at 62,039.

transformation facilities will resolve those objections interposed by Xcel concerning actual physical interconnection between Xcel facilities inside substations, and the electric distribution facilities designated by the PUC for potential transfer through eminent domain or otherwise.³²

2. The Requested Interconnection Order Is in the Public Interest

FPA Section 210(c)(1) requires that the Commission determine that an order requiring interconnection is in the public interest. The Commission has generally found that “as long as the interconnecting utility is fully and fairly compensated for the costs it incurs in connection with the requested interconnection, and there is no unreasonable impairment of reliability, requiring the interconnecting utility to establish a physical interconnection is in the public interest.”³³ Those conditions are amply satisfied in this case.

The City has repeatedly demonstrated its willingness to compensate Xcel fully for all costs incurred in connection with the interconnection of the future Boulder distribution facilities with the Xcel transmission system. The City proposes to fund the construction and maintenance of the proposed interconnections in accordance

³² CPUC Proceeding No. 15A-0589E, *Application of the City of Boulder, Colorado for Approval of the Proposed Transfer of Assets from Public Service Co. of Colorado*, Decision No. C19-0874 (October 28, 2019) at ¶¶ 69-71.

³³ *Illinois Mun. Elec. Assn v. Illinois Pwr. Co.*, 86 FERC ¶ 61,045 at 61,176 (1999). *Accord: Sierra Pacific Pwr. Corp.*, 89 FERC ¶ 61,234 at 61,693 (1999) (Under Section 210, “the Commission has found that interconnections serve the public interest so long as the interconnecting utility is fully and fairly compensated and there is no unreasonable impairment of reliability”).

with the Commission’s cost allocation standards for generator interconnections,³⁴ which demonstrates that system “modifications needed to implement the new interconnections would be economically sound and in the public interest.”³⁵ The consolidated System Impact Study report and the six Facilities Study reports prepared by Xcel at the City’s expense demonstrate that there is no impairment of reliability associated with the implementation of the interconnections requested in this Application. For these reasons, requiring Xcel to establish the six physical interconnections requested in this Application is in the public interest, as required by FPA Section 210(c)(1).

Xcel’s assertion of a contrary argument, apparently premised on its paraphrasing of certain formal requirements for an application for authorization to transfer utility assets set forth in 4 Colorado Code of Regulations § 723-3104(b)(IV) and (V),³⁶ is wholly without merit. In substance, Xcel executive management’s correspondence of October and November 2019 asserts a unilateral authority on the part of a transmission owner subject to a request for interconnection service to

³⁴ *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845-A, 166 FERC ¶ 61,167 at PP 29-33 (2019) (summarizing cost allocation requirements for network upgrades).

³⁵ *City of Tacoma, et al. v. So. Colum. Basin Irrig. Dist., et al.*, 118 FERC ¶ 61,202 at P 35 (2007).

³⁶ Exhibit COB-0012 at 2. The regulation that Xcel executive management’s October 15, 2019 letter cites (*id.* at 2 n. 2), 4 CCR § 723-3104, requires that an application for PUC authorization to transfer utility assets must include: “facts showing that the transaction which is the subject of the application is not contrary to the public interest” (4 CCR § 723-3104(b)(IV)) and “an evaluation of the benefits and detriments to the customers of each party and to all other persons who will be affected by the transaction which is the subject of the application” (4 CCR § 723-3104(b)(V)).

concoct its own version of “the public interest” to refuse that request. This is fundamentally inconsistent with FPA Section 210, which provides for the oversight of this Commission precisely in order to avoid this kind of *ipse dixit* refusal to proceed with interconnection. In addition, it is not credible to suggest, as Xcel executive management’s October 15 and November 25, 2019 letters do, that an interconnection study process conducted in accordance with its own *Interconnection Guidelines* and “Good Utility Practice and the engineering and operating principles, standards, guidelines and criteria of [Xcel] . . . [and] the Regional Reliability Council of which the Transmission Provider is a member,”³⁷ could somehow have neglected to consider and protect “the public interest.” It is especially not credible to suggest that the testimony of an Xcel witness pre-dating Xcel’s System Impact Studies and Facilities Studies somehow overrides the carefully conducted engineering analyses on which those Studies are premised. The Commission should find and conclude that those Studies establish that the interconnections requested in this Application are in the public interest. Xcel’s *post hoc* efforts to disown or discredit its own Studies, in favor of a rhetorical invocation of a specious “public interest” claim, are simply undeserving of credence.

3. The Requested Interconnection Order Will Encourage Conservation of Energy and Capital and Optimize the Efficiency of Use of Facilities and Resources

FPA Section 210(c)(2) requires that the Commission find that an interconnection order will (1) encourage conservation of energy and capital, or (2)

³⁷ Exhibit COB-0005 at 1.

optimize the efficiency of use of facilities and resources, or (3) improve the reliability of any electric utility system or Federal power marketing agency to which the order applies. The proposed interconnections requested in this Application demonstrably satisfy conditions (1) and (2) of Section 210(c)(2).³⁸ The interconnection order that Boulder seeks through this Application is therefore amply justified.

The proposed interconnections encourage conservation of both energy and capital. In particular, accepting the basic contention of Xcel executive management and counsel – that Xcel’s Interconnection Study process premised on Xcel’s own *Interconnection Guidelines* and “Good Utility Practice and the engineering and operating principles, standards, guidelines and criteria of [Xcel]”³⁹ somehow neglected or disserved “the public interest” – will waste substation assets for which Xcel will have no use when the distribution system with which they interconnect is acquired by Boulder. Thus, Boulder Terminal Substation will serve exclusively City distribution load once the City acquires the distribution facilities to serve customers within its corporate limits. Xcel’s Gunbarrel Substation distribution facilities serve a single retail customer, which will become a customer of the City within the City limits.

³⁸ The interconnections sought through this Application will likely produce reliability benefits to both the Boulder distribution system and Xcel’s transmission system following the separation of those two systems primarily due to the significant increase in transformer capacity to serve existing loads.

³⁹ Exhibit COB-0005 at 1.

In contrast to Xcel's regressive assertions of October and November 2019 outlined above, the proposed interconnections optimize the efficiency of use of facilities and resources. The Commission has long held that increased competition optimizes the use of existing facilities.⁴⁰ Increased competition will unquestionably result from Boulder's establishment of its own electric utility. In addition, the interconnections requested in this Application are the product of a comprehensive engineering study process, conducted first by Boulder in formulating its interconnection proposals and then by Xcel in reviewing and outlining the revisions to those proposals it deemed necessary to make them acceptable.

The alternative course to which Xcel executive management's disavowal of the interconnection study process seeks to drive Boulder is the duplicative (and therefore substantially more expensive and inefficient) course of constructing completely new substations, while the distribution side of Xcel's existing facilities would effectively be rendered useless to Xcel by Boulder's acquisition of the distribution facilities serving inside the City. Boulder and Xcel have already worked through determining where interconnection in an existing substation is not technically feasible or economically efficient. The decisions to (1) forgo interconnection at Xcel's Niwot Substation and to construct the City's new Wastewater Treatment Plant Substation and (2) to construct separate Sunshine and Leggett Substations exemplify this approach. The System Impact and Facilities Study conclusions that Xcel executive

⁴⁰ *City of Tacoma*, 118 FERC ¶ 61,202 at P 25 & n. 14; *East Kentucky Pwr. Coop.*, 115 FERC ¶ 61,347 at P 19; *Laguna Irrig. Dist.*, 84 FERC ¶ 61,226 at 62,089 (1998), *final order*, 88 FERC ¶ 61,164 (1999), *reh'g den.*, 95 FERC ¶ 61,305 (2001), *aff'd sub nom. Pac. Gas & Elec. Co. v. FERC*, 44 Fed. Appx. 170 (9th Cir. 2002).

management now seek to disavow for Boulder Terminal and Gunbarrel substations, in contrast, determined that sharing existing substation facilities was both feasible and economically efficient for Xcel and Boulder.

**4. The Requested Interconnection Order Meets the
Requirements of FPA Section 212**

FPA Section 210(c)(3) requires that an interconnection order satisfy the applicable requirements of FPA Section 212. In connection with an interconnection order under FPA Section 210, the primary applicable requirement of FPA Section 212 is the two-step process set forth in Section 212(c), under which the Commission first issues a proposed order setting forth its findings with respect to the proposed interconnection, and gives the parties to the proposed order a defined amount of time to negotiate the terms and conditions of their interconnection agreement. The second stage of the Section 212(c) process requires the Commission to review any voluntary agreement that may result from the Commission's proposed order, and issue a final order approving, modifying or rejecting that agreement. In the event that negotiations prove unsuccessful for any reason, the second stage of the Section 212(c) process requires the Commission to establish the terms and conditions for interconnection. Where, as here, the Commission is not asked to require the provision of transmission service, the provisions of Section 212 that relate to transmission service are not applicable to an application for interconnection under FPA Section 212.

CONCLUSION

For the foregoing reasons, the Commission should issue a proposed order, finding that (1) the City's request for an interconnection order meets the requirements of Sections 210 and 212 of the Federal Power Act, (2) the interconnections requested by the City at the Boulder Terminal, Gunbarrel, NCAR, Leggett, Sunshine, and Wastewater Treatment Plant substations are in the public interest, and (3) providing the parties with a reasonable time, not to exceed sixty days without further order of the Commission, in which to agree to terms and conditions for carrying out the order, including the apportionment and compensation or reimbursement of reasonable costs. Following the parties' report to the Commission at the end of the period so ordered, the Commission should enter a final order approving the parties' agreement (if one is reached) or establishing the terms and conditions for the requested interconnection.

Respectfully submitted,

/s/ John P. Coyle

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Counsel for the City of Boulder,
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Dated at Washington, D.C.
This 6th day of February 2020.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that one copy each of the foregoing Application for Order Directing Interconnection of Facilities on Reasonable Terms and Conditions Pursuant to Sections 210 and 212 of the Federal Power Act and accompanying Exhibits COB-0001 through COB-0027 have this day been served in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010) on the following persons:

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Dated: February 6, 2020
Washington, D.C.