COLORADO'S POWER PATHWAY

ARTICLE 2.303 SUBMISSION REQUIREMENTS FOR ALL PERMIT APPLICATIONS

EL PASO COUNTY SITE SELECTION AND CONSTRUCTION OF MAJOR FACILITIES OF A PUBLIC UTILITY

Application Submittal Requirements of El Paso County Guidelines and Regulations for Areas and Activities of State Interest Article 2.303

Requirement	Location in this Document/Permit Application
2.303 Submission Requirements for All Permit Applications	Section 2.303
(1) Completed application form in the format attached as Exhibit B and approved by the Development Services Director.	Section 2.303(1); Attachment A: Application Form
(2) The Director may require submission of any plan, study, survey or other information, in addition to the information required by this Section, at the applicant's expense, as in the Director's judgment is necessary to enable it to review and act upon the application.	Section 2.303(2); Letter of Intent, Section 5; Attachment A: Application Form; Attachment B: Vicinity Map; Attachment C: Routing and Siting Study for Segment 5; Attachment D: Noxious Weed Control Measures; Attachment E: Noise and EMF Study; Attachment F: Land Use and Zoning Map; Attachment G: Soils, Geologic, and Natural Hazard Areas Map; Attachment H: Emergency Response Procedures; Attachment I: Transportation Memorandum; Attachment J: Pole Details, Representative Photographs, and Simulations; Attachment K: Water Resources Map; Attachment L: Preliminary Drainage Analysis; Attachment M: List of Adjacent Property Owners; Attachment N: Existing Transmission Line Map; Attachment O: NRCS Soil Report; Attachment P: Owners and Interests; Attachment Q: Parcels Crossed by Transmission Line Easement and List of Roads Adjacent to Transmission Line Easement; Attachment R: Studies Evaluating Potential Impacts to Livestock From Electric Transmission Lines; Attachment S: Colorado Public Utilities Commission Decision Regarding Certificate of Public Convenience and Necessity and Noise and Magnetic Field Reasonableness for Colorado's Power Pathway; Attachment T: Fire District Coordination Letters; Attachment U: Results of the Federal Aviation Administration Notice Criteria Tool for Transmission Pole Locations in El Paso County;

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	Attachment V: Cultural Resource Desktop Review for Colorado's Power Pathway in El Paso County; Attachment W: Monitoring and Mitigation Plan; Attachment X: Typical Cross-Section of Proposed Transmission Line Corridor and El Paso County Road Right-of-Way
(3) Any application which requires compliance with § 24-65.5-101, et seq., C.R.S., (Notification to Mineral Owners of Surface Development) shall not be considered to have been submitted as complete until the applicant has provided a certification signed by the applicant confirming that the applicant or its agent has examined the records of the El Paso County Clerk and Recorder for the existence of any mineral estate owners or lessees that own less than full fee title in the property which is the subject of the application, and stating whether or not any such mineral estate owners or lessees exist. In addition, for purposes of the County convening its initial public hearing on any application involving property which mineral estate owners or lessees owning less than full fee title in the property have been certified by the applicant to exist, the application shall not be considered to have been submitted as complete until the applicant has provided an additional signed certification confirming that the applicant has, at least 30 days prior to the initial public hearing, transmitted to the County and to the affected mineral estate owners and lessees the notices required by C.R.S. §24- 65.5-101, et seq.	Section 2.303(3)
(4) Information describing the applicant	Section 2.303(4)
(a) The names, addresses, including email address and fax number, organizational form, and business of the applicant and, if different, the owner of the Project.	Section 2.303(4)(a)
(b) The names, addresses and qualifications, including those areas of expertise and experience with projects directly related or similar to that proposed in the application package, of individuals who are or will be responsible for constructing and operating the Project.	Section 2.303(4)(b)
(c) Written authorization of the application package by the Project owner, if different than the applicant.	Section 2.303(4)(c)
(d) Documentation of the applicant's financial and technical capability to develop and operate the Project, including a description of the applicant's experience developing and operating similar projects.	Section 2.303(4)(d); Section 2.303.9
(e) Written qualifications of report preparers.	Section 2.303(4)(e)
(5) Information Describing the Project	Section 2.303(5)
(a) Vicinity map showing the proposed site and the surrounding area	Section 2.303(5)(a); Attachment B: Vicinity Map
(b) Executive summary of the proposal indicating the scope and need for the Project.	Section 2.303(5)(b); Letter of Intent, Sections 1 and 5
(c) Plans and specifications of the Project in sufficient detail to evaluate the application against the applicable Review Criteria.	Section 2.303(5)(c); Letter of Intent, Section 5; Attachment A: Application Form; Attachment B: Vicinity Map; Attachment C: Routing and Siting Study for Segment 5; Attachment D: Noxious Weed Control Measures; Attachment E: Noise and EMF Study;

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(d) Descriptions of alternatives to the Project considered by the applicant. If the Director determines that the nature or extent of the proposal involves the potential for significant damage and warrants examination of other specific, less damaging alternatives, the Director may require the applicant to evaluate and present information on such additional alternatives as part of the application.	Section 2.303(5)(d); Letter of Intent, Section 3(b); Attachment C: Routing and Siting Study for Segment 5
(e) Schedules for designing, permitting, constructing and operating the Project, including the estimated life of the Project.	Section 2.303(5)(e); Letter of Intent, Section 2
(f) The need for the Project, including a discussion of alternatives to the Project that were considered and rejected; existing/proposed facilities that perform the same or related function;	Section 2.303(5)(f); Section 2.303(5)(d);

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and population projections or growth trends that form the basis of demand projections justifying the Project.	Letter of Intent, Section 3(b); Attachment C: Routing and Siting Study for Segment 5; Attachment S: Colorado Public Utilities Commission Decision Regarding Certificate of Public Convenience and Necessity and Noise and Magnetic Field Reasonableness for Colorado's Power Pathway
(g) Description of relevant conservation techniques to be used in the construction and operation of the Project.	Section 2.303(5)(g); Attachment D: Noxious Weed Control Measures; Attachment W: Monitoring and Mitigation Plan
(h) Description of demands that this Project expects to meet and basis for projections of that demand.	Section 2.303(5)(h)
(i) List of adjacent property owners and their mailing addresses.	Section 2.303(5)(i); Attachment M: List of Adjacent Property Owners
(6) Property rights, other permits and approvals.	Section 2.303(6)
(a) Description of property rights that are necessary for or that will be affected by the Project, including easements and property rights proposed to be acquired through negotiation or condemnation.	Section 2.303(6)(a); Attachment P: Owners and Interests; Attachment Q: Parcels Crossed by Transmission Line Easement and List of Roads Adjacent to Transmission Line Easement
(b) A list of all other federal, state and local permits and approvals that will be required for the Project, together with any proposal for coordinating these approvals with the County permitting process. Copies of any permits or approvals related to the Project that have been granted.	Section 2.303(6)(b); Letter of Intent, Section 4; Attachment U: Results of the Federal Aviation Administration Notice Criteria Tool for Transmission Pole Locations in El Paso County; Attachment S: Colorado Public Utilities Commission Decision Regarding Certificate of Public Convenience and Necessity and Noise and Magnetic Field Reasonableness for Colorado's Power Pathway
(c) Copies of relevant official federal and state consultation correspondence prepared for the Project; a description of all mitigation required by federal, state and local authorities; and copies of any draft or final environmental assessments or impact statements required for the Project.	Section 2.303(6)(c); Section 2.303(6)(b); Letter of Intent, Section 4; Attachment U: Results of the Federal Aviation Administration Notice Criteria Tool for Transmission Pole Locations in El Paso County; Attachment S: Colorado Public Utilities Commission Decision Regarding Certificate of Public Convenience and Necessity and Noise and Magnetic Field Reasonableness for Colorado's Power Pathway;

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	Attachment W: Monitoring and Mitigation Plan; U.S. Fish and Wildlife and Colorado Parks and Wildlife Consultation Letters
(7) Land Use.	Section 2.303(7)
(a) Provide a map at a scale relevant to the Project and acceptable to the Department describing existing land uses and existing zoning of the proposed Project area and the Project service area, including peripheral lands which may be impacted. The land use map shall include but need not necessarily be limited to the following categories: residential, commercial, industrial, extractive, transportation, communication and utility, institutional, open space, outdoor recreation, agricultural, forest land and water bodies. Show all special districts (school, fire, water, sanitation, etc.) within the Project area.	Section 2.303(7)(a); Attachment F: Land Use and Zoning Map
(b) All immediately affected public land boundaries should be indicated on the map. Potential impacts of the proposed development upon public lands will be visually illustrated on the map as well as described in the text.	Section 2.303(7)(b); Attachment F: Land Use and Zoning Map
(c) Specify whether and how the proposed Project conforms to the El Paso County Master Plan.	Section 2.303(7)(c); Section 2.303.6(c); Attachment C: Routing and Siting Study for Segment 5; Attachment F: Land Use and Zoning Map; Attachment G: Soils, Geologic, and Natural Hazard Areas Map; Attachment H: Emergency Response Procedures; Attachment L: Preliminary Drainage Analysis; Attachment N: Existing Transmission Line Map; Attachment T: Fire District Coordination Letters
(d) Specify whether and how the proposed Project conforms to applicable regional and state planning policies.	Section 2.303(7)(d); Letter of Intent, Section 4
(e) Specify whether and how the proposed Project conforms to applicable federal land management policies.	Section 2.303(7)(e); Section 2.303(6)(c); Letter of Intent, Section 4; U.S. Fish and Wildlife and Colorado Parks and Wildlife Consultation Letters
(f) If relevant to the Project design, describe the agricultural productivity capability of the land in the Project area, using Soils Conservation Service soils classification data.	Section 2.303(7)(f); Attachment R: Studies Evaluating Potential Impacts to Livestock From Electric Transmission Lines
(g) Describe the probability that the Project may be significantly affected by earthquakes, floods, fires, snow, slides, avalanches, rockslides or landslides and any measures that will be taken to reduce the impact of such events upon the Project.	Section 2.303(7)(g); Soils & Geology Report; Attachment G: Soils, Geologic, and Natural Hazard Areas Map; Attachment K: Water Resources Map; Attachment O: NRCS Soil Report; Attachment W: Monitoring and Mitigation Plan

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(h) Specify if excess service capabilities created by the proposed Project will prove likely to generate sprawl or strip development.	Section 2.303(7)(h)
(i) Specify whether the demand for the Project is associated with development within or contiguous to existing service areas.	Section 2.303(7)(i)
(8) The applicant shall supply a surface and subsurface drainage analysis.	Section 2.303(8); Attachment L: Preliminary Drainage Analysis
(9) Financial feasibility of the Project.	Section 2.303(9)
(a) Relevant bond issue, loan and other financing approvals or certifications (ex: approved bond issues; bond counsel opinion).	Section 2.303(9)(a)
(b) Business plan that generally describes the financial feasibility of the Project.	Section 2.303(9)(b); Attachment S: Colorado Public Utilities Commission Decision Regarding Certificate of Public Convenience and Necessity and Noise and Magnetic Field Reasonableness for Colorado's Power Pathway
(10) Local infrastructure and services impacts. An impact analysis that addresses the manner in which the applicant will comply with the relevant Permit Application Review Criteria. The impact analysis shall include the following information: description of existing capacity of and demand for local government services including but not limited to roads, schools, water and wastewater treatment, water supply, emergency services, transportation, infrastructure, and other services necessary to accommodate the Project within El Paso County.	Section 2.303(10); Section 2.303(21); Section 2.303(22); Attachment I: Transportation Memorandum; Attachment T: Fire District Coordination Letters
(11) Recreational Opportunities. Description of the impacts and net effect of the Project on present and potential recreational opportunities.	Section 2.303(11)
(12) Areas of Paleontological, Historic or Archaeological Importance. Description of the impacts and net effect of the Project on sites of paleontological, historic or archaeological interest.	Section 2.303(12); Attachment V: Cultural Resource Desktop Review for Colorado's Power Pathway in El Paso County
(13) Nuisance. Descriptions of noise, glare, dust, fumes, vibration, and odor levels anticipated to be caused by the Project.	Section 2.303(13); Attachment E: Noise and EMF Study; Attachment R: Studies Evaluating Potential Impacts to Livestock From Electric Transmission Lines; Attachment S: Colorado Public Utilities Commission Decision Regarding Certificate of Public Convenience and Necessity and Noise and Magnetic Field Reasonableness for Colorado's Power Pathway
(14) Air Quality. Description of the impacts and net effect that the Project would have on air quality during both construction and operation, and under both average and worst case conditions, considering particulate matter and aerosols, oxides, hydrocarbons, oxidants, and other chemicals, temperature effects and atmospheric interactions.	Section 2.303(14)
(15) Visual Quality. Description of the impacts and net effect that the Project would have on visual quality, considering viewsheds, scenic vistas, unique landscapes or land formations within view of the Project area.	Section 2.303(15); Attachment J: Pole Details, Representative Photographs, and Simulations

Requirement	Location in this Document/Permit Application
(16) Surface Water Quality.	Section 2.303(16)
(a) Map and/or description of all surface waters relevant to the Project, including description of provisions of the applicable regional water quality management plan, and NPDES Phase II Permit and necessary El Paso County Erosion and Stormwater Quality Control Permit ("ESQCP"), Section 404 Federal Clean Water Act Permit that applies to the Project and assessment of whether the Project would comply with those provisions.	Section 2.303(16)(a); Section 2.303(19); Attachment K: Water Resources Map
(b) Existing data monitoring sources.	Section 2.303(16)(b)
(c) Descriptions of the immediate and long-term impact and net effects that the Project would have on the quantity and quality of surface water under both average and worst case conditions.	Section 2.303(16)(c)
(17) Groundwater Quality. (a) Map and/or description of all groundwater, including any and all aquifers relevant to the Project. At a minimum, the description should include: (i) Seasonal water levels in each portion of the aquifer affected by the Project. (ii) Artesian pressure in said aquifers. (iii) Groundwater flow directions and levels. (iv) Existing aquifer recharge rates and methodology used to calculate recharge to the aquifer from any recharge sources. (v) For aquifers to be used as part of a water storage system, methodology and results of tests used to determine the ability of the aquifer to impound groundwater and aquifer storage capacity. (vi) Seepage losses expected at any subsurface dam and at stream- aquifer interfaces and methodology used to calculate seepage losses in the affected streams, including description and location of measuring devices. (vii) Existing groundwater quality and classification. (viii) Location of all water wells potentially affected by the Project and their uses.	Section 2.303(17)(a)
(b) Description of the impacts and net effect of the Project on groundwater.	Section 2.303(17)(b); Attachment C: Routing and Siting Study for Segment 5
(18) Water Quantity.	Section 2.303(18)
(a) Map and/or description of existing stream flows and reservoir levels relevant to the Project.	Section 2.303(18)(a); Attachment K: Water Resources Map
(b) Map and/or description of existing minimum stream flows held by the Colorado Water Conservation Board.	Section 2.303(18)(b)
(c) Descriptions of the impacts and net effect that the Project would have on water quantity.	Section 2.303(18)(c)
(d) Statement of methods for efficient utilization of water, including recycling and reuse.	Section 2.303(18)(d)
(19) Floodplains, Wetlands and Riparian Areas: Terrestrial and Aquatic Animals. Plant Life and Habitat. Applicant shall only provide description of foregoing natural conditions, animal and plant life at, but not to exceed, the level of detail required by other federal or state Permits or reviews which are applicable to the Project.	Section 2.303(19); Section 2.303(16); Section 2.303(6)(c); Attachment C: Routing and Siting Study for Segment 5; Attachment K: Water Resources Map
(20) Soils, Geologic Conditions and Natural Hazards.	Section 2.303(20)

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(a) Map and/or description of soils, geologic conditions, and natural hazards including but not limited to soil types, drainage areas, slopes, avalanche areas, debris fans, mud flows, rock slide areas, faults and fissures, seismic history, and wildfire hazard areas, all as relevant to the Project area.	Section 2.303(20)(a); Attachment G: Soils, Geologic, and Natural Hazard Areas Map
(b) Descriptions of the risks to the Project from natural hazards.	Section 2.303(20)(b); Attachment G: Soils, Geologic, and Natural Hazard Areas Map; Attachment H: Emergency Response Procedures; Attachment O: NRCS Soil Report; Attachment T: Fire District Coordination Letters
(c) Descriptions of the impacts and net effect of the Project on soil and geologic conditions in the area.	Section 2.303(20)(c)
(21) Hazardous Materials.	Section 2.303(21)
(a) Description of all solid waste, hazardous waste, petroleum products, hazardous, toxic, and explosive substances to be used, stored, transported, disturbed or produced in connection with the Project, including the type and amount of such substances, their location, and the practices and procedures to be implemented to avoid accidental release and exposure.	Section 2.303(21)(a); Attachment T: Fire District Coordination Letters
(b) Location of storage areas designated for equipment, fuel, lubricants, and chemical and waste storage with an explanation of spill containment plans and structures.	Section 2.303(21)(b); Attachment T: Fire District Coordination Letters
(22) Monitoring and Mitigation Plan. (a) Description of all mitigation that is proposed to avoid, minimize or compensate for adverse impacts of the Project and to maximize positive impacts of the Project. (i) Describe how and when mitigation will be implemented and financed. (ii) Describe impacts that are unavoidable that cannot be mitigated. (b) Description of methodology used to measure impacts of the Project and effectiveness of proposed mitigation measures. (c) Description, location and intervals of proposed monitoring to ensure that mitigation will be effective.	Section 2.303(22); Attachment C: Routing and Siting Study for Segment 5; Attachment W: Monitoring and Mitigation Plan
(23) Additional Information. The Director may request that the applicant supply additional information related to the Project if the Director and/or the Permit Authority will not be able to make a determination on any one of the applicable Review Criteria without the additional information. Such additional information may include applicant's written responses to comments by a referral agency.	Section 2.303(23); Attachment Q: Parcel List; Attachment R: Studies Evaluating Potential Impacts to Livestock From Electric Transmission Lines; Attachment S: Colorado Public Utilities Commission Decision Regarding Certificate of Public Convenience and Necessity and Noise and Magnetic Field Reasonableness for Colorado's Power Pathway; Attachment T: Fire District Coordination Letters; Attachment U: Results of the Federal Aviation Administration Notice Criteria Tool for Transmission Pole Locations in El Paso County;

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LIST OF ACRONYMS AND ABBREVIATIONS

1041 permit	Permit to locate and construct major facilities of a public utility
Act	Powerline Trails Act
APEN	Air Pollutant Emissions Notice
APLIC	Avian Power Line Interaction Committee
Application	1041 Permit Application
BMP	Best Management Practice
CCR	Code of Colorado Regulations
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
Compass	Colorado Cultural Resource Online Database
CPCN	Certificate of Public Convenience and Necessity
CPW	Colorado Parks and Wildlife
CPUC	Colorado Public Utilities Commission
CRS	Colorado Revised Statutes
CWA	Clean Water Act
dBA	A-weighted decibels
EMF	Electric and Magnetic Fields
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
IEEE	Institute of Electrical and Electronics Engineers
IPaC	USFWS Information for Planning and Consultation
kV	Kilovolt
MF	Magnetic field
NESC	National Electrical Safety Code
NHD	National Hydrography Dataset
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
Pathway	Colorado's Power Pathway

PLJV	Playa Lakes Joint Venture
ROW	Right-of-Way
SC	Species of Concern
STL	State Trust Land
SWMP	Stormwater Management Plan
TCA	Temporary Construction Area
Tetra Tech	Tetra Tech, Inc.
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WEST	Western EcoSystems Technology, Inc.
WOTUS	Waters of the U.S.
Xcel Energy	Public Service Company of Colorado, a Colorado corporation

COMPLIANCE WITH SECTION 2.303 SUBMITTAL REQUIREMENTS

2.303 SUBMISSION REQUIREMENTS FOR ALL PERMIT APPLICATIONS

2.303(1) Completed application form in the format attached as Exhibit B and approved by the Development Services Director.

The completed application form can be found in Attachment A of this permit to locate and construct major facilities of a public utility (1041 Permit) Application (Application).

2.303(2) The Director may require submission of any plan, study, survey or other information, in addition to the information required by this Section, at the applicant's expense, as in the Director's judgment is necessary to enable it to review and act upon the application.

A description of Colorado's Power Pathway (Pathway) facilities in El Paso County is provided in Section 5 of the Letter of Intent (page 16). In accordance with Section 2.303.2 of the Appendix B - Guidelines and Regulations for Areas and Activities of State Interest of the El Paso County Colorado Land Development Code (El Paso County §1041 Regulations), Public Service Company of Colorado, a Colorado corporation conducting business as Xcel Energy (Xcel Energy) has provided plans and studies as attachments to this Application in sufficient detail for El Paso County to review and act upon the Application. The Table of Contents in the Letter of Intent (page ii) lists the attachments submitted with this Application. Xcel Energy will provide additional plans, studies, surveys, or other information related to Pathway as required by the El Paso County Planning Director.

2.303(3) Any application which requires compliance with § 24-65.5-101, et seq., C.R.S.,(Notification to Mineral Owners of Surface Development) shall not be considered to have been submitted as complete until the applicant has provided a certification signed by the applicant confirming that the applicant or its agent has examined the records of the El Paso County Clerk and Recorder for the existence of any mineral estate owners or lessees that own less than full fee title in the property which is the subject of the application, and stating whether or not any such mineral estate owners or lessees exist. In addition, for purposes of the County convening its initial public hearing on any application involving property which mineral estate owners or lessees owning less than full fee title in the property have been certified by the applicant to exist, the application shall not be considered to have been submitted as complete until the applicant has provided an additional signed certification confirming that the applicant has, at least 30 days prior to the initial public hearing, transmitted to the County and to the affected mineral estate owners and lessees the notices required by C.R.S. §24-65.5-101, et seq.

The "Surface Development Notification Act" (Colorado Revised Statutes [CRS] 24-65.5-101 et seq.) was passed specifically to facilitate mineral owner agreements like those contemplated by 2.303(3) for many types of developments. That Act specifically excludes applications associated with electric transmission lines, CRS 24-65.5-101 and 24-65.5-102(2)(a). To the extent there are any active oil and gas activities or facilities within Xcel Energy's final proposed easement areas, Xcel Energy works with the owners/operators of such facilities to ensure it addresses and mitigates their concerns.

2.303(4) Information Describing the Applicant

2.303(4)(a) The names, addresses, including email address and fax number, organizational form, and business of the applicant and, if different, the owner of the Project.

The applicant is Public Service Company of Colorado, a Colorado corporation conducting business as Xcel Energy. The following information provides the applicant

information for the Application per Section 2.303(4)(a) of the El Paso County §1041 Regulations.

Applicant:
Jennifer Chester
Senior Manager, Siting and Land Rights
Xcel Energy
1800 Larimer Street, Suite 400
Denver, CO 80202
303-285-6533
Jennifer.L.Chester@xcelenergy.com

2.303(4)(b) The names, addresses and qualifications, including those areas of expertise and experience with projects directly related or similar to that proposed in the application package, of individuals who are or will be responsible for constructing and operating the Project.

Xcel Energy is a major U.S. electricity and natural gas company, with operations in 8 Western and Midwestern states. Xcel Energy provides a comprehensive portfolio of energy-related products and services to 3.7 million electricity customers and 2.1 million natural gas customers through its regulated operating companies.

Construction contractors will work with the appropriate jurisdictions to obtain and follow all related construction permits. The following information provides the names, addresses, and qualifications of the Xcel Energy representatives responsible for constructing and operating Pathway.

Xcel Energy and their construction contractor Quanta Infrastructure Solutions Group, LLC (QISG) have prepared and obtained the following land use permits for Pathway as of February 2025:

- Cheyenne County – Conditional Use Permit, 1041 Permit
- City of Aurora – Conditional Use Permit and Site Plan
- Crowley County – Use by Special Review Permit
- Kiowa County – 1041 Permit
- Kit Carson County – Land Use Change Permit
- Lincoln County – Use By Special Review Permit

- Morgan County – 1041 Permit
- Pueblo County – 1041 Permit
- Washington County – Use by Special Review Permit, 1041 Permit
- Weld County – Site Plan Review Permit, Use by Special Review Permit, 1041 Permit

All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and maintained during construction as required.

Applicant:
Jennifer Chester
Senior Manager, Siting and Land Rights
Xcel Energy
1800 Larimer Street, Suite 400
Denver, CO 80202
Phone: 303-285-6533
Email: Jennifer.L.Chester@xcelenergy.com

Qualifications: Jennifer Chester is the Manager of Siting and Land Rights responsible for overseeing routing/siting, permitting, and public outreach activities for Xcel Energy projects in Colorado. Ms. Chester has 24 years of experience working in the utility planning industry as a consultant and utility employee routing and siting facilities, working with project stakeholders in public outreach forums, land use permitting activities, as well as other state and federal processes required for the construction and operation of electric transmission facilities.

Engineer:
Parker Wrozek, P.E.
Senior Manager, Engineering
Xcel Energy
1800 Larimer Street, Suite 500
Denver, CO 80202
303-285-6724
stanley.p.wrozek@xcelenergy.com

Qualifications: Parker Wrozek is the Senior Manager of Transmission Line Engineering for Xcel Energy – Colorado. He leads a team of engineers and designers who complete designs of high voltage transmission lines from 44 kV to 345 kV. He has over 15 years of experience with design, procurement, and construction of high voltage transmission lines on numerous projects across the United States, and is responsible for maintaining high quality designs while meeting cost, schedule, regulatory, and permitting requirements. Mr. Wrozek is a registered Professional Engineer in the State

of Colorado and has a Bachelor of Science degree in Civil Engineering from Michigan Technological University.

Construction:
Stephen Cirfus
Construction Manager
Quanta Infrastructure Solutions Group, LLC
1050 17th St. Denver, CO 8026

Qualifications: Quanta Services is the industry leader in providing specialized infrastructure solutions to the electric power, renewable energy, underground utility, and communications industries. QISG serves as the program management platform and single point of accountability on large infrastructure projects executed by the family of Quanta companies and select strategic partners. Quanta Services has completed over 16,500 miles of 230-kV, 345-kV, 500-kV and 765-kV transmission line construction since 2014.

Quanta is currently constructing or has recently completed the following projects within North America:

- SunZia Transmission project, 550-mile, high-voltage direct current transmission line spanning from New Mexico to Arizona.
- Energy Gateway Program, a new 128-mile 500-kV transmission line in Idaho.
- West Fort McMurray 500-kV Transmission Line, a 310-mile, high voltage transmission line in North-Central Alberta, Canada.

PAR Electrical, the Quanta transmission line operating unit constructing the transmission line, has been constructing transmission line projects since 1954. The company has completed 200 miles of Pathway transmission line construction since 2024.

Stephen Cirfus is the Lead Construction Manager for Pathway. He has 5 years of experience managing the construction of transmission lines. He has 13 years' experience as a project safety lead/manager prior to becoming a construction manager.

Operations:
Brett Gruesner
Senior Control Center Manager
Network Reliability Lead
18201 West 10th Ave.
Golden, CO 80401
303-273-4810

Qualifications: Brett Gruesner is the Sr. Control Center Manager of the Transmission Control Center with 18 years of experience operating Xcel Energy's transmission grid in Colorado.

2.303(4)(c) Written authorization of the application package by the Project owner, if different than the applicant.

Xcel Energy is the Applicant and Project Owner, so no separate written authorization from the Project Owner is required.

2.303(4)(d) Documentation of the applicant's financial and technical capability to develop and operate the Project, including a description of the applicant's experience developing and operating similar projects.

The applicant has both the financial and technical ability to develop and operate Pathway. Per the Colorado Public Utilities Commission (CPUC)'s Certificate of Public Convenience and Necessity (CPCN) approval on June 2, 2022, Pathway is deemed to be in the public interest and recovery of the anticipated cost of Pathway is appropriate. The CPCN for Pathway states that Xcel Energy had met its burden of proof and sufficiently demonstrated the need for Pathway. The CPUC evaluated extensive cost and schedule information in arriving at this decision. The Project Cost Estimate, Project Cost Forecast, and the Colorado's Power Pathway Summary Schedule dated February 25, 2021, from the CPUC CPCN application is provided with this 1041 Application as Attachment: Cost and Schedule Information from the Colorado's Power Pathway Certificate of Public Convenience and Necessity Application. Xcel Energy's electric pricing plans are subject to the Transmission Cost Adjustment (TCA) bill rider. This charge recovers transmission investments not already included in base rates and is subject to annual changes to be effective on January 1 of each year. As part of the CPCN application for Pathway, Xcel Energy filed with the CPUC an Advice Letter to revise its TCA rider. The CPUC decision stated that recovery of the Pathway costs through the TCA rider is appropriate. The CPUC Decision for a CPCN for Pathway is provided as Attachment S. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and maintained during construction as required, and best management practices (BMPs) will be implemented to address public health, safety, and welfare and in accordance with permit conditions. See additional discussion of financial feasibility in Section 2.303(9) of this document.

2.303(4)(e) Written qualifications of report preparers.

Qualifications of the Application preparers are provided in Table 1.

Table 1: Qualifications of Preparers of 1041 Permit Application

Name	Address	Qualifications
XCEL ENERGY		
Jennifer Chester Senior Manager, Siting and Land Rights	1800 Larimer Street, Suite 400, Denver, CO 80202	Jennifer Chester is the Senior Manager of Siting and Land Rights responsible for overseeing routing/siting, permitting, and public outreach activities for Xcel Energy projects in Colorado. Ms. Chester has 22 years of experience working in the utility planning industry as a consultant and utility employee routing and siting facilities, working with project stakeholders in public outreach forums, land use permitting activities, as well as other state and federal processes required for the construction and operation of electric transmission facilities.
Tiffany Hennig Principal Land Rights Agent	790 S Buchanan Street, Amarillo, TX 79101	Tiffany Hennig is a Principal Land Rights Agent with over twelve years of experience developing permit applications to local, state, and federal agencies on a variety of infrastructure projects, including those for siting, constructing, and operating transmission lines and substation facilities. Ms. Hennig manages consultants that support development of environmental assessments, field delineations of natural resources, and ensures compliance with permit conditions.
Heather Brickey Project Director	1800 Larimer Street, Suite 400, Denver, CO 80202	Heather Brickey is the Project Director for the Colorado's Power Pathway with fifteen years of experience in utility project management, Ms. Brickey manages the Pathway project management team and is responsible for overseeing all aspects of the projects through development, procurement, and construction.
Josh Peterson Transmission Line Engineering	1800 Larimer Street, Suite 400, Denver, CO 80202	Josh Peterson is a Principal Transmission Line Engineer with 15 years' experience designing transmissions lines between 69kV and 345kV.
Julie Stencel Legal	1800 Larimer Street, Suite 1400, Denver, CO 80202	Julie Stencel is Assistant General Counsel for Xcel Energy with over 25 years of legal experience in land use and real estate development matters. Ms. Stencel is responsible for managing all legal support necessary for the acquisition and land use permitting for Colorado's Power Pathway

Name	Address	Qualifications
		Project along with all transmission projects in Colorado, Texas and New Mexico.
TETRA TECH		
Stephanie Phippen Consultant, Routing, Permitting & Environmental	390 Union Boulevard, Suite 400, Lakewood, CO 80228	Ms. Phippen is a senior project manager and environmental planner with 24 years of experience. She has a demonstrated ability to lead environmental projects from start to finish. She works with clients and her team of technical specialists to meet environmental requirements and obtain permits at the local, state, and federal levels. Ms. Phippen has extensive experience working through land use permitting processes in Colorado and other U.S. states. Her experience includes electric transmission line, substation, wind, solar, natural gas pipeline, hydropower, and other energy projects.

2.303(5) Information Describing the Project

2.303(5)(a) Vicinity map showing the proposed site and the surrounding area.

The vicinity map is provided in Attachment B.

2.303(5)(b) Executive summary of the proposal indicating the scope and need for the Project.

An executive summary of Pathway is provided in Section 1 of the Letter of Intent (page 1). A description of Pathway facilities proposed in El Paso County is provided in Section 5 of the Letter of Intent (page 16).

2.303(5)(c) Plans and specifications of the Project in sufficient detail to evaluate the application against the applicable Review Criteria.

A description of Pathway facilities in El Paso County is provided in Section 5 of the Letter of Intent (page 16). The portion of the Pathway route in El Paso County is detailed in Attachment B and described in the Letter of Intent (Section 5). In accordance with Section 2(303)(5)(c) of the El Paso County §1041 Regulations, Xcel Energy has provided plans and specifications as attachments to this Application in sufficient detail for El Paso County to evaluate the Application against the applicable review criteria. The Table of Contents in the Letter of Intent (page ii) lists the attachments submitted with this Application.

Pathway compliance with the Review Criteria required for all applications as per Article 2.405 of the El Paso County §1041 Regulations is addressed in the Section2.405 Review Criteria for All Applications document provided as part of this Application. Pathway compliance with the Review Criteria required for Site Selection and Construction of a Major Facility of a Public Utility as per Article 5.202 of the El Paso County §1041 Regulations is addressed in the Section 5.202 Review Criteria document provided as part of this Application.

2.303(5)(d) Descriptions of alternatives to the Project considered by the applicant. If the Director determines that the nature or extent of the proposal involves the potential for significant damage and warrants examination of other specific, less damaging alternatives, the Director may require the applicant to evaluate and present information on such additional alternatives as part of the application.

The purpose of Pathway is to create a network transmission system that can integrate new generation resources needed to meet Colorado's clean energy goals. Two alternatives to the Project were considered, including non-structural alternatives and structural alternatives. Xcel Energy has standard 345 kilovolt (kV) structure designs to keep consistent material across Pathway, and for maintenance. Alternate structure designs were not considered unless driven by special design criteria, which was not the case. The transmission line design follows the National Electric Safety Code (NESC), which is the governing national code. The state of Colorado requires transmission lines be designed according to the NESC.

The existing infrastructure is not adequate to meet demand. Therefore, no non-structural alternatives are viable (such as conservation of energy use, no development, or management [different scheduling, conservation programs, facility design, land trades etc.]).

Alternatives to the project such as alternate locations and routes, alternative types of facilities, use of existing right-of-way (ROW), joint use of ROWs with other utilities, and upgrades to existing facilities were analyzed. Pathway routing and siting efforts were divided by segment and documented in a series of routing and siting studies. Each routing and siting study is interrelated due to the overlap in segment Study Areas and shared substation endpoints. Each Routing and Siting Study documents the process utilized to review and consider reasonable siting and routing alternatives for the new major electrical facilities (pursuant to CRS 29-20-108(4)(a) and (b)). The routing and siting studies do not identify specific construction-related components, such as laydown/staging yards, access routes and haul routes. The Routing and Siting Study for

Segment 5 is included in Attachment C and provides an alternatives analysis to address this requirement.

Given the small area occupied by the transmission poles, landscaping is not proposed as part of Pathway. Access to the transmission poles from nearby Interstate, U.S. Highways, and local roads will be confirmed prior to construction.

Determining the location of the preferred route was accomplished through an extensive process described in Section 3(b) of the Letter of Intent (page 7) and the Routing and Siting Study for Segment 5 (Attachment C) that included engaging the public, landowners and other stakeholders. Cultural and historic resources, technical and engineering requirements, environmental constraints, existing and planned land use, and other factors were evaluated and compared to establish the transmission line route options. The preferred route chosen has the highest percentage (63%) of co-location with existing linear infrastructure, including existing transmission lines, roads, rail and pipelines for its entire length and is less impactful to the landscape compared to other route alternatives. This route was considered based on feedback from the public, jurisdiction staff and Colorado Parks and Wildlife (CPW). Access for construction and maintenance is favorable along this route option given its proximity to existing infrastructure. Generally, this route option balances impacts across resources due to its co-location with other existing infrastructure. For these reasons, the Project as proposed in this Application is the preferred alternative among those analyzed in the Routing and Siting Study for Segment 5 (Attachment C).

2.303(5)(e) Schedules for designing, permitting, constructing and operating the Project, including the estimated life of the Project.

Construction of the Segment 5 transmission line, the associated new substations and substation expansions or equipment additions is scheduled to begin in 2025 and be completed in 2027, provided required approvals are obtained. Pathway facilities in El Paso County will be constructed during this timeframe; the exact construction timeline will be determined by the construction contractor. Additional information on the estimated Pathway schedule is provided in Section 2 of the Letter of Intent (page 4).

2.303(5)(f) The need for the Project, including a discussion of alternatives to the Project that were considered and rejected; existing/proposed facilities that perform the same or related function; and population projections or growth trends that form the basis of demand projections justifying the Project.

Public utilities are required under CRS 40-5-101 to obtain a CPCN from the CPUC prior to constructing a new facility or system or the extension of an existing facility or system.

In determining whether to grant a CPCN, the CPUC considers whether the utility has established: (1) a present or future need for the facility; (2) that existing facilities are not reasonably adequate and available to meet that need; and (3) that the utility has evaluated alternatives to the proposed facility.

In March 2021, Xcel Energy filed a CPCN application with the CPUC describing the purpose, need, alternatives, and public benefits of constructing Pathway. In June 2022, CPUC provided written approval of the CPCN for Segments 1–5, finding that Xcel Energy has demonstrated that the public convenience and necessity requires construction of Pathway. The CPUC determined that Xcel Energy has sufficiently demonstrated the need for Pathway Segments 1–5; existing facilities are not adequate or available to meet the need for increased transmission capacity to serve required new renewable generation or to provide the reliability and resiliency necessary to support a system highly dependent on variable resources; and other alternatives will not negate the need for Pathway. The CPUC Decision for a CPCN for Pathway is provided as Attachment S.

The CPUC did not approve construction of the Extension in the January 2024 Phase II Decision regarding Xcel Energy's Electric Resource Plan and Clean Energy Plan. Xcel Energy may bring a proposal to construct the Extension and Longhorn Substation forward again in the future but has paused its further development as part of Pathway.

While the CPUC determines a public need for Pathway, it does not approve the location of specific project facilities. The location and land use approvals will be through easement negotiations with landowners and the land use approval process in the applicable jurisdictions where the Pathway facilities would be located. The Routing and Siting Study for Segment 5 is attached to this Application as Attachment C (see Section 3(b) of the Letter of Intent [page 7] and Section 2.303(5)(d) of this document for additional information).

2.303(5)(g) Description of relevant conservation techniques to be used in the construction and operation of the Project.

Mitigation measures planned for Pathway are listed by resource in Attachment W: Monitoring and Mitigation Plan. Impacts will be minimized during construction of the Project and will be addressed by Xcel Energy. If mitigation attributable to Project impacts is required, it will be addressed during Project construction by Xcel Energy pursuant to permit requirements. Conservation techniques to be used in the construction of Pathway will be implemented as required by the site-specific Stormwater Management Plan (SWMP) and ROW permits. To avoid or minimize impacts to wildlife, Pathway will implement measures such as requiring proper trash and food debris disposal and compliance with posted speed limits. Colorado Parks and Wildlife

recommendations (CPW 2021) will be incorporated where practicable. To avoid or minimize potential project impacts to eagles and other migratory birds and raptors, tree/vegetation clearing will be conducted during the nonbreeding season for birds (September 1–April 15) if feasible. If vegetation clearing cannot occur during the nonbreeding season, vegetation clearance surveys, nest surveys, and burrowing owl surveys may be conducted per U.S. Fish and Wildlife Service (USFWS) and CPW guidance to identify avian nesting activity and determine appropriate avoidance buffers (CPW 2020, CPW 2021) or monitor actives nest sites until determined to be inactive. In addition, electrical components of the transmission lines will be separated to minimize the risk of avian contact and will follow Avian Power Line Interaction Committee (APLIC) guidelines (APLIC 2006). Once construction has been completed for each Pathway segment, temporary work areas and the transmission line ROW will be restored in a manner generally similar to the condition prior to construction or as may be provided for in private agreements. This work may include fence repair, rut removal, decompaction, tilling, seeding and stabilization measures. Areas not needed for ongoing operations and maintenance and not being used for crop production will be reseeded as soon as practicable and in coordination with the landowner following construction in a given area. Xcel Energy's ROW agents will meet with landowners to learn about site-specific circumstances which may need to be addressed, including any loss or damage that occurs to crops or other non-restorable property during construction. Noxious Weed Control Measures are provided in Attachment D.

2.303(5)(h) Description of demands that this Project expects to meet and basis for projections of that demand.

Pathway will add a network transmission system that can integrate wind and solar generation sources in the Eastern Plains region of Colorado where they are most efficient to where the energy demand is the highest. By linking the best areas for generating wind and solar energy with where demand is, Pathway will improve the state's electric grid and enable future renewable energy development in the Eastern Plains region of Colorado.

Pathway is a backbone transmission system designed to transmit power over long distances. Pathway will connect generation sources in eastern Colorado to the existing electric grid to meet demand throughout Colorado. The current electric transmission facilities in the Eastern Plains do not have adequate capacity to meet the forecasted demand. Facilities in El Paso County are part of the larger Pathway that creates a transmission "loop" to provide additional transmission capacity. Pathway will be able to integrate approximately 6,500 megawatts of electric power output from new generation.

Colorado's Power Pathway supports the state-mandated goal of an 80% reduction in carbon emissions by 2030, which all electric utilities are required to comply with.

Colorado has an open transmission system, so Xcel Energy's transmission lines also carry electricity generated by other utilities and cooperatives around the state, benefitting everyone who uses electricity. All transmission providers in Colorado will have access to Colorado's Power Pathway to deliver clean, renewable energy to its customers, who will still be serviced by their current power provider. Because Colorado's open transmission system carries electricity generated by multiple utilities that is distributed to homes and businesses by local power companies, both electric utilities and electricity users around the state benefit from this Project.

2.303(5)(i) List of adjacent property owners and their mailing addresses.

Attachment M includes a list of adjacent property owners and mailing addresses within 1,320 feet of the Pathway ROW.

2.303(6) Property Rights, Other Permits, and Approvals

2.303(6)(a) Description of property rights that are necessary for or that will be affected by the Project, including easements and property rights proposed to be acquired through negotiation or condemnation.

Xcel Energy will acquire the required ROW easements from property owners for the area underlying the transmission line and thereby will hold a recognized property interest in the land on which Pathway is proposed. Prior to commencing construction on any individual property, all easements required for construction of Segment 5 of Pathway on a parcel within El Paso County will be secured and recorded (or Order of Immediate Possession obtained from the district court, as applicable) in the County property records prior to the start of Pathway construction on that individual parcel. Title documentation listing the owners and interests for each property along the proposed transmission line route in El Paso County is included as Attachment P. As of December 17, 2024, Xcel Energy has acquired 32 of 50 landowners (64%) of the Pathway transmission line route in El Paso County.

An often-unintended consequence of requiring land control ahead of permit approval is that such requirement actually truncates the timeline for voluntary acquisition. While Xcel Energy has the power of eminent domain, Xcel Energy strongly prefers to negotiate landowner easements. If required for approval of this Application, Xcel Energy will agree to a condition of approval providing that Xcel Energy will obtain all necessary easements prior to commencing construction activity on any individual property.

2.303(6)(b) A list of all other federal, state and local permits and approvals that will be required for the Project, together with any proposal for coordinating these approvals with the County permitting process. Copies of any permits or approvals related to the Project that have been granted.

Federal, state, and local permits/approvals may be required prior to construction of Pathway. A table of federal, state, and local permits and approvals that have been or will be required for Pathway is provided in Section 4 of the Letter of Intent (pages 9-15).

The Federal Aviation Administration (FAA) administers approvals for Structures Occurring in Navigable Airspace. Xcel Energy has queried the FAA Notice Criteria Tool for all transmission pole locations in El Paso County (Attachment U); all poles located in El Paso County are below the threshold of FAA's criteria to file for approval of Structures Occurring in Navigable Airspace, therefore no further coordination with FAA is warranted.

State approvals anticipated for Pathway may include permits for road, bridge and highway crossings or road occupancy permits from Colorado Department of Transportation (CDOT) and stormwater discharge permits and Air Pollutant Emissions Notice (APEN) from Colorado Department of Public Health and Environment (CDPHE). Xcel Energy will negotiate easements with the Colorado State Land Board for the portions of the Pathway transmission line on state-owned lands. The CPUC has provided written approval of the CPCN for Segments 1 through 5 based on a determination that Pathway is in the public interest (see Attachment S).

Local permits and approvals that may be required by El Paso County include, but are not limited to, this 1041 Permit, Work in Right of Way Permit, Special Transport Permit, Erosion and Stormwater Quality Control Permit. Any necessary construction-related authorizations, which are typically administrative in nature, will be obtained between the time local land use permits are approved and when construction begins.

Many of the local permits and approvals for Pathway were issued by other jurisdictions and are not applicable or relevant to the portion of Pathway Segment 5 being permitted in El Paso County, copies of these permits and approvals, therefore have not been provided with the Application materials.

2.303(6)(c) Copies of relevant official federal and state consultation correspondence prepared for the Project; a description of all mitigation required by federal, state and local authorities; and copies of any draft or final environmental assessments or impact statements required for the Project.

Studies under the National Environmental Policy Act, including but not limited to an Environmental Impact Statement, are currently not anticipated for the portion of Pathway in El Paso County due to the lack of a federal nexus (i.e., no federal funding, federal lands, or federal permits or approvals that trigger National Environmental Policy Act compliance).

A table of federal, state, and local permits and approvals that have been or will be required for the project, including informal coordination, is provided in Section 4 of the Letter of Intent (pages 9-15) and discussed in Section 2.303(6)(b) of this document.

The FAA administers approvals for Structures Occurring in Navigable Airspace. Xcel Energy has queried the FAA Notice Criteria Tool for all transmission pole locations in El Paso County (Attachment U); all poles located in El Paso County do not meet the FAA's criteria to file for approval of Structures Occurring in Navigable Airspace, therefore no further coordination with FAA is warranted.

The CPUC has provided written approval of the CPCN for Segments 1 through 5 based on a determination that Pathway is in the public interest (see Attachment S). The CPUC's written approval provides Xcel Energy the authority and direction to move forward as designed with Segments 1-5 of Colorado's Power Pathway. The CPUC's order confirms the 345-kilovolt transmission line, associated substations, and the 'transmission loop' the new infrastructure will provide, will allow Xcel Energy to deliver new renewable energy, help meet Colorado's carbon reduction requirements and deliver electric reliability for the region.

In the written approval, some of the CPUC's determinations include:

- Meeting 2030 carbon emission reduction targets depends on the timely completion of the transmission line.
- Colorado's Power Pathway is appropriately sized to accommodate more than 5,000 megawatts of new generation.
- The looped transmission line configuration provides additional resiliency and reliability benefits for the region while avoiding costs.

- Cost estimates and timelines for Colorado's Power Pathway, along with magnetic field and noise level requirements, are reasonable.
- Undergrounding is not in the public interest due to cost and other factors.

The CPUC Decision for a CPCN for Colorado's Power Pathway is provided as Attachment S.

Xcel Energy has conducted informal coordination with federal and state agencies including the USFWS and CPW for the portion of Pathway in Segment 5; formal consultation is not required. Xcel Energy has met with CPW staff and has also engaged with the USFWS regarding Colorado's Power Pathway and will follow regulation-based recommended non-disturbance buffers and construction timing restrictions to avoid or minimize impacts to special-status species. The Pathway team has coordinated with USFWS and CPW on threatened and endangered species, as applicable. A summary of coordination with USFWS and CPW to-date for Pathway in El Paso County is provided in Table 2, and copies of coordination letters sent to USFWS and CPW are included with the Application materials on El Paso County's Electronic Development Application Review Program portal.

Table 2: Summary of Coordination Meetings with U.S. Fish and Wildlife Service and Colorado Parks and Wildlife

Type Coordination	Agency	Attendees	Date	Notes
Microsoft Teams Meeting	CPW	CPW; Xcel Energy; Tetra Tech, Inc. (Tetra Tech)	12/10/2021	Purpose: to provide information about the Project and receive feedback from CPW on routing/siting considerations. Project overview and status were presented. Comments/questions from CPW were addressed. Initial comments were received about the Project from CPW, and another meeting was scheduled to discuss specific routes once links were narrowed down. A Pathway Team action item was to share GIS shapefiles for the links and narrower substation areas to CPW and to schedule a workshop with CPW to discuss specific links.
Microsoft Teams Meeting	CPW	CPW; Xcel Energy; Tetra Tech	01/21/2022	Workshop to discuss specific routes/links. Project overview and discussion of route options for

Type Coordination	Agency	Attendees	Date	Notes
				Segment 5 were presented by the Pathway team. CPW commented on specific portions of the route it had concerns about in regard to wildlife resources. A preferred route had not been determined at that point; therefore, discussion was based on each of the focus areas: southern (Pueblo County), central (El Paso and Elbert counties), and northern (Arapahoe and Lincoln counties).
Microsoft Teams Meeting	USFWS	USFWS; Xcel Energy; Tetra Tech; Burns and McDonnell; and Western EcoSystems Technology, Inc. (WEST)	05/09/2022	Purpose of the meeting was to provide information regarding the Project to USFWS, and to receive feedback from USFWS. Project overview and status were presented by the Pathway Team. Focus of the meeting was largely focused on the lesser prairie-chicken in relation to routing options and area of potential effects. USFWS provided feedback about specific species and initial thoughts about which species might be a concern. USFWS requested further information about Project routing. Action items for the Pathway team were to provide GIS shape files to USFWS on May 9, 2022 and to coordinate a follow-up meeting with USFWS.
Microsoft Teams Meeting	USFWS	USFWS; Xcel Energy; Tetra Tech; Burns and McDonnell; and WEST	06/06/2022	Purpose of the meeting was to provide information about the Project and receive feedback from USFWS. The GIS shape files were provided to USFWS prior to the meeting so that they could comment on routing for the Project, and any concerns about specific locations. The eastern black rail was discussed and possible sharing of data to understand where the species may be a

Type Coordination	Agency	Attendees	Date	Notes
				concern for the Project. Possibility of timing/avoidance for eastern black rail was discussed as was a CPW survey protocol and habitat assessment. There were no specifics from USFWS in regard to Segment 5. USFWS wanted to review the GIS shape files before commenting.

Xcel Energy has engaged with Colorado's State Historic Preservation Office regarding Pathway and has evaluated results of previous surveys as part of the routing and siting process.

Other federal and state agencies that Pathway has coordinated with regarding the Pathway alignment in El Paso County include Schriever Space Force Base, the U.S. Air Force Academy, CDOT and the Colorado State Land Board.

No federal or state mitigation measures are required for Pathway in El Paso County. Xcel Energy will use mitigation measures as described in Attachment W, Monitoring and Mitigation Plan.

2.303(7) Land Use

2.303(7)(a) Provide a map at a scale relevant to the Project and acceptable to the Department describing existing land uses and existing zoning of the proposed Project area and the Project service area, including peripheral lands which may be impacted. The land use map shall include but need not necessarily be limited to the following categories: residential, commercial, industrial, extractive, transportation, communication and utility, institutional, open space, outdoor recreation, agricultural, forest land and water bodies. Show all special districts (school, fire, water, sanitation, etc.) within the Project area.

A map showing existing land use, zoning, residences, irrigation pivots, and special districts is provided as Attachment F. That part of Pathway located within unincorporated El Paso County is in the Agriculture (A-35) zoning district. According to the El Paso County Master Plan, the adjacent existing land use is Rural (El Paso County 2021). No changes to existing zoning are being requested.

Publicly available data of the locations of conservation easements and protected areas is included in the Land Use and Zoning Map (Attachment F; COMap 2023). No Pathway facilities in El Paso County are located within conservation easements or protected areas. As part of the easement acquisition process, Xcel Energy has determined that no Pathway facilities in El Paso County are located on Conservation Reserve Program lands.

2.303(7)(b) All immediately affected public land boundaries should be indicated on the map. Potential impacts of the proposed development upon public lands will be visually illustrated on the map as well as described in the text.

The Land Use and Zoning Map (Attachment F) includes public land boundaries.

Pathway crosses Colorado State Land Board land twice in El Paso County; one crossing occurs adjacent to Rush Road and another crossing occurs adjacent to Holtwood Road (see the Land Use and Zoning Map, Attachment F). Xcel Energy will negotiate easements with the Colorado State Land Board for the portions of the Pathway transmission line on state-owned lands.

2.303(7)(c) Specify whether and how the proposed Project conforms to the El Paso County Master Plan.

Pathway compliance with the 2021 El Paso County Master Plan (El Paso County 2021) is addressed in Table 3.

Table 3: Pathway Compliance with El Paso County Master Plan

Goal, Policy, or Strategy	Pathway Compliance
Land Use	
Goal 1.1 - Ensure compatibility with established character and infrastructure capacity.	Pathway is sited within the Agricultural District within El Paso County (Attachment F) and the Rural placetype of the El Paso County Master Plan. Construction and operation of Pathway will not inhibit agricultural production or operations. Pathway will result in minimal permanent impacts to agricultural lands. Aside from the transmission pole foundation footprint, areas under and around Pathway facilities can continue to be used for agricultural operations after construction has been completed. Through private agreements with individual landowners, the proposed alignment spans existing irrigation ditches and pivot irrigation in fields. It is designed adjacent to and parallel with section lines, parcel boundaries, and public ROW to limit impacts

Goal, Policy, or Strategy	Pathway Compliance
	from the development on overall agricultural operation and production in the area. Where feasible, the Pathway route through El Paso County is co-located along existing infrastructure to minimize impacts to the surrounding area (see the Existing Transmission Line Map, Attachment N). Approximately 25 miles of the Pathway transmission line in El Paso County are co-located along existing roads and electric transmission infrastructure. The El Paso County Master Plan states: "The place-based approach is not focused on the use of a specific parcel, but rather is concerned with the collective mix of uses that establish a place within the El Paso County community" (El Paso County 2021). While utilities are not listed as a recommended land use in the Rural placetype, the El Paso County Master Plan states that "planning for future locations [of utility facilities] is difficult due to the unique set of requirements that must be met for each facility. However, future utility facilities can still align with the Master Plan by maintaining consistency with the adjacent placetypes" (El Paso County 2021). Pathway is consistent with the Rural placetype of the El Paso County Master Plan, as it will not inhibit agricultural production or operations.
Goal 1.2 - Coordinate context-sensitive annexation and growth strategies with municipalities.	Pathway is not an urban development and is not located in incorporated municipalities. Pathway will not require annexation or adversely impact annexation or growth of certain municipalities, therefore Pathway will not affect annexation or growth strategies with municipalities.
Goal 1.3 - Encourage a range of development types to support a variety of land uses.	Pathway is sited within the Agricultural District within El Paso County (Attachment F) and the Rural placetype of the El Paso County Master Plan. Pathway is compatible with rural agricultural use. The transmission line alignment spans existing irrigation ditches and pivot irrigation in fields to minimize effects to existing agricultural operations. Aside from the small footprint of individual transmission poles, areas under and around Pathway can continue agricultural use.
Goal 1.4 - Continue to encourage policies that ensure "development pays for itself".	Pathway will not require additional community or local government services beyond those currently provided in the area. Pathway creates no additional demand for transportation infrastructure, educational facilities, housing, water (other than trucked-in water for construction), wastewater treatment, or public transportation.
Housing & Communities	

Goal, Policy, or Strategy	Pathway Compliance
Goal 2.1 - Promote development of a mix of housing types in identified areas.	No residential development is requested in this Application. Therefore, this policy does not directly apply to Pathway.
Goal 2.2 - Preserve the character of rural and environmentally sensitive areas.	Pathway is sited within the Agricultural District within El Paso County (Attachment F) and the Rural placetype of the El Paso County Master Plan and is compatible with agricultural use. The transmission line alignment spans existing irrigation ditches and pivot irrigation in fields to minimize effects to existing agricultural operations. Aside from the small footprint of individual transmission poles, areas under and around Pathway can continue agricultural use. Sensitive natural resource areas, including wetlands and critical habitats for wildlife, were specifically considered as part of the routing and siting analysis when the preferred location for the transmission line was identified to minimize potential interference from Pathway facilities (Attachment C).
Goal 2.3 - Locate attainable housing that provides convenient access to goods, services, and employment.	No residential development is requested in this Application. Therefore, this policy does not directly apply to Pathway.
Goal 2.4 - Support aging-in-place housing options to meet residents' needs through all stages of life.	No residential development is requested in this Application. Therefore, this policy does not directly apply to Pathway.
Economic Development	
Goal 3.1 - Recruit new businesses and spur the development of growing sectors.	Pathway will add a network transmission system that can integrate wind and solar generation sources in the Eastern Plains region of Colorado where they are most efficient to where the energy demand is the highest. By linking the best areas for generating wind and solar energy with where demand is, Pathway will improve the state's electric grid and enable future renewable energy development in the Eastern Plains region of Colorado. Colorado's Power Pathway will support the economic vitality of our state, while delivering significant economic benefits to rural communities across eastern and southern Colorado over the short- and long-term. More immediately, construction will require

Goal, Policy, or Strategy	Pathway Compliance
	substantial amounts of contract labor, while also providing local jurisdictions and host communities with additional tax revenues and potential employment opportunities. Moreover, once Colorado's Power Pathway is completed, it will drive ongoing job opportunities and employment in the clean energy projects (wind, solar, etc.) that ultimately interconnect to Colorado's Power Pathway. Additionally, generation developers may be able to build projects that otherwise were idle due to lack of transmission access to market and/or transmission constraints. Generation projects may provide economic development through increased jobs associated with construction and local tax-based revenue associated with land usage, not to mention payments to existing landowners. Metropolitan areas of the state will have increased access to renewable generation to serve area load and meet the goals of specific retail and wholesale customers and local communities.
Goal 3.2 - Support efforts to recruit, train, and retain a skilled workforce.	Pathway will deliver economic benefits to rural communities across eastern and southern Colorado, including El Paso County. More immediately, Pathway construction will provide local jurisdictions and host communities with potential additional tax revenue and employment opportunities. Revenue may increase during construction for local businesses such as restaurants, gas stations, grocery stores, hotels, and other local businesses. Existing businesses and social services are adequate to support Pathway given the size of the construction crew and temporary nature of the construction activities. No impacts to emergency health care facilities or law enforcement services are therefore anticipated. Xcel Energy anticipates that a maximum number of 95 construction workers[1] will be needed for construction of Pathway transmission lines in El Paso County. Construction crews may reside in the area during construction.
Goal 3.3 - Encourage the development of commercial districts in underserved areas.	Pathway is not a commercial development therefore this goal is not directly applicable to Pathway.

[1] Personnel may not be located or concentrated at same work area on the same day.

Goal, Policy, or Strategy	Pathway Compliance
Goal 3.4 - Utilize economic opportunity zones to support new business development.	Xcel Energy appreciates El Paso County's goal to utilize opportunity zones to support new business development. Pathway is not located in any opportunity zones designated in the El Paso County Master Plan. As Pathway is a utility project, this goal is not directly applicable to Pathway.
Goal 3.5 - Coordinate with military installations to foster new development that is compatible with installations and create new jobs.	Pathway coordinated with Schriever Space Force Base and the U.S. Air Force Academy to determine that the route is compatible with existing and future operations associated with their facilities. See Attachment C, Routing and Siting Study for Segment 5, for additional details.
Transportation & Mobility	
Goal 4.1 - Establish a transportation network that connects all areas to one another, emphasizing east-west routes, reducing traffic congestion, promoting safe and efficient travel.	Pathway is not a transportation project therefore this goal is not directly applicable to Pathway. Xcel Energy has reviewed the El Paso County Major Transportation Corridors Plan (El Paso County 2016), per Section 5.104(2) of the El Paso County §1041 Regulations. The only roads along the Pathway route in El Paso County that are classified as arterial or expressway are Judge Orr and CO-94. The entirety of the transmission poles along the Pathway route in El Paso County will be further than 105 feet away from the centerline of any County road with a current or proposed classification as arterial or expressway, except to cross such road. At these crossing locations, the transmission poles will be further than 105 feet from the road centerline. During construction, temporary traffic impacts are expected to be minor. The impact on local roads will vary daily, as construction teams move along the route. Permitting serves to mitigate potential impacts on local County roads. The permitting process includes the development of traffic control plans and necessary tracking control and remediation plans. The resulting conditions of approval will be followed through the Pathway construction. Following construction, no traffic impacts are anticipated.
Goal 4.2 - Promote walkability and bikability where multimodal transportation systems are feasible.	Pathway is not a transportation project and will not affect the existing multimodal transportation system therefore this goal is not directly applicable to Pathway.

Goal, Policy, or Strategy	Pathway Compliance
Goal 4.3 - Foster transit-supportive development and coordinate to expand public transportation options.	Xcel Energy appreciates El Paso County's goal to foster transit-supportive development and expand public transportation options. Pathway is not a transportation project and will not affect the existing public transportation system therefore this goal is not directly applicable to Pathway.
Goal 4.4 - Develop a sustainable funding mechanism for transportation infrastructure and maintenance.	Pathway is not a transportation project therefore this goal is not directly applicable to Pathway. See the response to Goal 4.1.
Community Facilities	
Goal 5.1 - Coordinate with agencies to provide high-quality community facilities, services, and infrastructure to enhance quality of life.	Pathway is a $1.7 billion investment proposed by Xcel Energy to improve the state's electric grid and enable future renewable energy development around the state. Pathway will ensure safe, reliable and economical electric service to the public, boost the regional economy, and create jobs during its construction. The purpose of Pathway is to create a network transmission system that can integrate new generation resources needed to meet Colorado's clean energy goals. Pathway is a backbone transmission system that will connect generation sources in eastern Colorado to demand throughout Colorado. The current electric transmission facilities in the Eastern Plains do not have adequate capacity to meet the forecasted demand. Facilities in El Paso County are part of the larger Pathway that creates a transmission "loop" to provide additional transmission capacity. Pathway will be able to integrate approximately 6,500 megawatts of electric power output from new generation. Pathway will support the El Paso County Master Plan infrastructure goal to ensure adequate access for alternative energy resources in the future by providing additional transmission capacity for alternative energy resources. No new or upgraded public services or facilities are anticipated to be needed to serve Pathway in El Paso County.
Goal 5.2 - Improve the effectiveness of public safety through coordination,	Transmission lines are built and maintained to meet or exceed safety standards, such as those specified by the NESC and the North American Electric Reliability Corporation. Every effort is made to ensure safety in construction, operation, and maintenance of transmission lines. Transmission lines are designed to withstand extreme weather conditions and protective

Goal, Policy, or Strategy	Pathway Compliance
funding, and planning.	devices at line terminals stop the electricity flow under abnormal operating circumstances. The transmission poles will be equipped with shield wires above the energized line; this equipment provides protection against lightning strikes. Xcel Energy's transmission lines are monitored 24/7/365 for line contact, the term describing when an object comes in contact with the transmission line conductors. If there is an unanticipated event in the line, the line is isolated from the system to protect the public and the line from operating under unsafe conditions. Xcel Energy's transmission lines are inspected annually to check for line connections and damage. For the safety of the general public, unauthorized personnel are not permitted to come in contact with the transmission line conductor wire. In the rare event of a fire emergency, Xcel Energy will likely be aware of an issue before the general public or emergency responders. Nevertheless, the public is encouraged to contact Xcel Energy's emergency number: 800-895-1999. In the event of an outage or equipment failure, the affected equipment is immediately de-energized and Xcel Energy personnel are dispatched to the site. Xcel Energy personnel receive safety training for emergency situations relating to high-voltage electrical equipment. Xcel Energy also coordinates closely with local fire departments and first responders and consults with them to discuss any concerns within their response area. Xcel Energy offers free online safety training to fire departments and first responders that is based on national standards through the Responding to Utility Emergencies Program. Emergency Response Procedures are provided in Attachment H. Xcel Energy will coordinate with each Fire District crossed by Pathway in El Paso County. Copies of the Fire District Coordination Letters are provided in Attachment T.
Infrastructure	
Goal 5.3 - Ensure adequate provision of utilities to manage growth and development.	See the response to Goal 5.1.
Goal 5.4 - Use best management practices to protect water quality, conserve water,	Pathway is not anticipated to generate pollution during operations and maintenance and will not require permanent pollution control equipment. A SWMP will be created, and BMPs incorporated as necessary.

Goal, Policy, or Strategy	Pathway Compliance
minimize impacts of flooding, and beautify El Paso County.	There will be minor localized impact in drainage direction in areas of permanent grading but no impact to drainage basins or sub-basins runoff along the transmission line. Pathway will not result in additional runoff or negatively affect stormwater erosion across the full scope of the proposed development. The application package includes a Preliminary Drainage Analysis (Attachment L) that describes how Pathway will limit potential impacts to drainage and stormwater erosion during construction and operation of the transmission line. Xcel Energy will submit any related permitting as necessary to align with the County's requirements and will continue to coordinate with the County on these plans as required. Water to be used during construction will be obtained from a local, permitted source. Pathway will not require water use during operation. Pathway will not require water rights for construction, maintenance, or operation and will not impact the viability of the water supply for rural area residences in the County.
Military	
Goal 6.1 - Support compatible land uses within and in close proximity to bases and associated facilities.	Pathway coordinated with Schriever Space Force Base and the U.S. Air Force Academy in/near the Pathway Study Area to determine that the route selected is compatible with existing and future operations associated with their facilities. See Attachment C, Routing and Siting Study for Segment 5, for additional details.
Goal 6.2 - Ensure coordinated planning efforts for transportation impacts and access.	See the response to Goal 6.1.
Recreation & Tourism	
Goal 7.1 - Support high-quality, sustainable outdoor recreation as a key amenity for residents and visitors.	Xcel Energy appreciates El Paso County's efforts to support high-quality sustainable outdoor recreation. The Powerline Trails Act (Act) was passed in 2022 to help raise awareness and create opportunities for Public Entities to co-locate public recreation trails within Transmission Corridors. Xcel Energy has notified El Paso County of the potential for construction of a Powerline Trail within the Pathway Transmission Corridor. Xcel Energy is not in the business of building, owning, or maintaining public recreation trails and its land rights typically do not give it the right to do so. Nor does the Act require Transmission Providers to allow a Powerline Trail or any other facility on any of its Transmission

Goal, Policy, or Strategy	Pathway Compliance
	Corridors. Xcel Energy's role under the Act is limited to facilitating the potential co-location of such trails by providing guidance to Public Entities on things such as what safety clearances need to be maintained, which materials should be used in the construction of the trail, and where such trails can safely be co-located with Xcel Energy's facilities. Powerline Trails will ultimately be constructed by Public Entities after consulting with Xcel Energy, the Colorado Division of Parks and Wildlife, and landowners about the safety and feasibility of such trails after the Transmission Corridor is constructed.
Goal 7.2 - Explore projects, programs, and initiatives for enhancing tourism in unincorporated areas.	Pathway is compatible with the existing agricultural land uses that surround the proposed transmission line routing though El Paso County, including the forms of tourism and recreation that draw visitors to the Eastern Plains. As such, Pathway will not affect any current or future tourism activities, or other tourist attractions in El Paso County.
Goal 7.3 - Plan for and provide a variety of parks, trails, and open space within the region.	See the response to Goal 7.1.
Community Health	
Goal 8.1 - Support community environmental health initiatives through collaborative efforts with other organizations.	By working with individual landowners, obtaining, and meeting applicable federal state and county permits, co-locating the transmission line route, or strategically running the route adjacent to other existing public infrastructure improvements, the Pathway alignment mitigates and minimizes to the furthest extent possible the impacts to the health, safety, and welfare of the adjacent agricultural inhabitants. Sensitive natural resource areas, including wetlands and critical habitats for wildlife, were specifically considered as part of the routing and siting analysis when the preferred location for the transmission line was identified to minimize potential interference from Pathway facilities (see Attachment C).
Goal 8.2 - Ensure all residents have reasonable access to safe, affordable, and nutritious food.	Xcel Energy appreciates El Paso County's goal to ensure all residents have access to food. Pathway is not a commercial development therefore this goal is not directly applicable to Pathway.
Environment	

Goal, Policy, or Strategy	Pathway Compliance
Goal 9.1 - Consider the environmental impacts related to natural resource conservation, air quality, water quality, wildlife habitat, and waste management during any planning process.	By working with individual landowners, obtaining, and meeting applicable federal state and county permits, co-locating the transmission line route, and strategically running the route adjacent to other existing public infrastructure improvements, the Pathway alignment mitigates and minimizes to the furthest extent possible the impacts to the environment. Sensitive natural resource areas, including wetlands and critical habitats for wildlife, were specifically considered as part of the routing and siting analysis when the preferred location for the transmission line was identified to minimize potential interference from Pathway facilities (see Attachment C). Xcel Energy has communicated with CPW and USFWS representatives regarding Pathway (see Section 2.303(6)(c) of this document) and will continue to coordinate with them throughout design and construction of Pathway and comply with applicable regulatory requirements. Short-term effects to air quality are anticipated from a temporary increase in construction vehicles, which may increase construction equipment exhaust (fumes), and clearing and preparing areas for construction (fugitive dust). Xcel Energy will apply for a CDPHE APEN for land development prior to construction and follow state standards to control the release of fugitive dust related to construction, if necessary. The APEN will be required for a disturbance greater than 25 contiguous acres and land development activities longer than 6 months. Xcel Energy will comply with permit application requirements, El Paso County standards, and construction protocols to ensure that Pathway does not affect water quality. Prior to construction, a Storm Water Permit for Construction Activities will be obtained from CDPHE, and a site-specific SWMP will be developed. Construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, will be removed and taken to a disposal facility authorized to accept such materials. Enclosed containment will be provided for trash disposal. Pathway will not create any wastewater nor have any facilities requiring wastewater treatment. Portable temporary bathrooms that will be serviced on a regular basis will be on site during the construction period.
Goal 9.2 - Promote sustainable best practices with	Xcel Energy's sustainability strategy begins with our mission to provide customers with safe, clean, reliable energy at a competitive price, and goes beyond to address environmental,

Goal, Policy, or Strategy	Pathway Compliance
regard to development and infrastructure.	social and governance topics important to our business and stakeholders. Xcel Energy's 2022 Sustainability Report is available online at: https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Sustainability%20Report/2022%20SR/Sustainability_Report_Full.pdf. Colorado's Power Pathway will improve the state's electric grid and enable future renewable energy development by providing backbone transmission capacity. The Eastern Plains region of Colorado is one of the nation's best areas for wind and solar energy generation, but it does not currently have a network transmission system that can integrate these new generation resources into the state's interconnected grid system, which is needed to meet Colorado's clean energy goals. Pathway will allow developers of energy generation projects to interconnect energy resources located in the areas of the state that are underserved by backbone transmission lines and allow Xcel Energy to deliver energy to electric customers.
Resiliency & Hazard Mitigation	
Goal 10.1 - Prioritize hazard mitigation as growth and development occurs.	Xcel Energy's facilities are designed, constructed, operated, and maintained to meet or exceed all applicable requirements of the Institute of Electrical and Electronics Engineers (IEEE) standards and accepted industry standards and practices including IEEE 979, Guide for Substation Fire Protection. Applicable fire laws and regulations, as outlined in CRS 31-15-601, will be observed during construction and normal operation of the transmission line. Fires along transmission lines are very rare. Xcel Energy's powerlines are monitored and controlled remotely from an operations center where event response is coordinated. In the rare event of an emergency, Xcel Energy will likely be aware of an issue before the general public or emergency responders. Nevertheless, the public is encouraged to contact Xcel Energy's emergency number: 800-895-1999 to report an emergency. Unauthorized personnel, including emergency responders, should not approach the facilities and should not touch the electric lines or anyone or anything in contact with them. Xcel Energy has developed a comprehensive program designed to help protect lives, homes and property from the threat of wildfire. While safety has always been a core value, Xcel Energy first launched the Wildfire Protection Program in 2019 to identify, evaluate and proactively minimize the risk of wildfire caused by infrastructure. The program includes work in 17 Colorado counties.

Goal, Policy, or Strategy	Pathway Compliance
	Xcel Energy recognizes that wildfires pose a significant threat to our customers, communities and our state as a whole – and is proactively taking steps to minimize wildfire risks associated with operating the system. Xcel Energy's cross-functional Wildfire Mitigation Team works together to: • Accelerate inspections in identified Wildfire Risk Zones and conduct new and enhanced inspections on equipment and poles. • Replace equipment and poles that pose an increased risk and explore the use of new technologies. • Analyze the strength and ability of transmission and distribution structures to withstand potential windspeeds and maintain adequate ground clearances. • Conduct tree trimming, brush removal and other vegetation management in the areas around structures, corridors and equipment. • Improve protocols and fire-safe work practices. • Work directly with communities, first responders and other stakeholders to inform, educate, gather and incorporate feedback for programs. The new structures will be equipped with shield wires above the energized line; this equipment adds to the structure height but also provides protection against lightning strikes. Xcel Energy also coordinates closely with local fire departments and first responders and consults with them to discuss any concerns within their response area. Xcel Energy offers free online safety training to fire departments and first responders that is based on national standards through its Responding to Utility Emergencies Program. Emergency Response Procedures are provided as Attachment H. Xcel Energy will coordinate with each Fire District crossed by Pathway in El Paso County. Copies of the Fire District Coordination Letters are provided in Attachment T.
Goal 10.2 - Continue to support planning efforts and best practices to ensure community resiliency.	Xcel Energy acknowledges El Paso County's policy to support planning efforts and best practices to ensure community resiliency. The proposed Pathway alignment through unincorporated El Paso County is generally located in areas with low risks from both natural and human-caused hazards (see Attachment G, Soils, Geologic, and Natural Hazard Areas Map). See also the response to Goal 10.1.

Goal, Policy, or Strategy	Pathway Compliance
Goal 10.3 – Continue to coordinate communication and activity among Office of Emergency Management (OEM), emergency service providers, and military installations to improve responses and recovery to natural hazards and emergencies.	Xcel Energy coordinates closely with local fire departments and first responders and consults with them to discuss any concerns within their response area. Xcel Energy offers free online safety training to fire departments and first responders that is based on national standards through its Responding to Utility Emergencies Program. See also the response to Goal 10.1.

2.303(7)(d) Specify whether and how the proposed Project conforms to applicable regional and state planning policies.

The applicable regulatory framework is described in Section 4 of the Letter of Intent (pages 9 - 15), which lists all federal, state, and local permits and approvals that have been or will be required for Pathway. Any necessary construction-related authorizations, which are typically administrative in nature, will be obtained between the time local land use permits are approved and when construction begins. Many of the local permits and approvals for Pathway were issued by other jurisdictions and are not applicable or relevant to the portion of Pathway Segment 5 being permitted in El Paso County, copies of these permits and approvals, therefore have not been provided with the Application materials.

State approvals may include, for example, permits for road, bridge and highway crossings or road occupancy permits from the CDOT, and stormwater discharge permits and APEN from the CDPHE.

In 2019 Colorado passed House Bill 19-1261, the Climate Action Plan to Reduce Pollution, which includes science-based targets of reducing statewide greenhouse gas pollution 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels (Colorado Energy Office 2021). Colorado's Power Pathway supports the state Climate Action Plan to Reduce Pollution, which all electric utilities are required to comply with.

Pathway complies with the Pikes Peak Area Council of Governments Water Quality Management Plan (PPACG 2020). Pathway is located within Regions 4B and 6 in the

Water Quality Management Plan. Xcel Energy will comply with permit application requirements, County Standards, and construction protocols to ensure that Pathway does not violate water quality standards. Compliance with applicable federal, state and county construction and waste management procedures will prevent accidental spills or runoff of sediment or contaminants to waterbodies or groundwater. A SWMP will be created, and BMPs incorporated into the design as necessary. Construction activities will be performed using methods that prevent entrance or accidental spillage of solid matter, contaminants, debris, and other pollutants and wastes into flowing streams or dry watercourses, lakes, and underground water sources. Pathway will not require permanent drawing out of a well or aquifer. Water to be used during construction will be obtained from a local, permitted source. Pathway will not create any wastewater nor have any facilities requiring wastewater treatment. Portable temporary bathrooms that will be serviced on a regular basis will be on site during the construction period. Pathway will avoid regulated floodplains to the extent practicable. Pathway will not require water use during operation.

Pathway complies with the El Paso County Parks Master Plan (El Paso County 2022). Pathway is not located within any designated El Paso County Parks, Open Spaces, Regional Trails, Trailheads, Proposed Trails/Bicycle Routes, Candidate Open Space Areas, or Candidate Regional Parks (El Paso County 2022). During construction and operation, Pathway will not impact any El Paso County parks, open spaces, trails or any recreational activities.

2.303(7)(e) Specify whether and how the proposed Project conforms to applicable federal land management policies.

Pathway has conducted informal coordination with federal agencies including the USFWS for the portion of Pathway in Segment 5; formal consultation is not required. A list of federal, state, and local permits and approvals that have been or will be required for Pathway is provided in Section 4 of the Letter of Intent (pages 9 - 15).

Xcel Energy has engaged with the USFWS regarding Pathway and will follow recommended non-disturbance buffers and construction timing restrictions to avoid or minimize impacts to special-status species (see additional discussion in Section 2.303(6)(c) of this document). Copies of coordination letters sent to USFWS are included with the Application materials.

No federal mitigation measures are required for Pathway. Local land use and other permit approvals are likely to have conditions of approval that may include mitigation measures.

Studies under the National Environmental Policy Act, including but not limited to an Environmental Impact Statement, are currently not anticipated to be required for the portion of Pathway in El Paso County.

2.303(7)(f) If relevant to the Project design, describe the agricultural productivity capability of the land in the Project area, using Soils Conservation Service soils classification data.

Pathway has been sited to minimize surface-use impacts to the surrounding community and preserve land for agriculture, rangelands, wetlands, and critical habitat areas. By working with individual landowners, collocating the transmission line route, or strategically locating the route adjacent to other existing public infrastructure improvements or property lines, the Pathway alignment has minimized the impacts to adjacent agricultural uses.

Pathway is sited within "Agriculture" zone districts within El Paso County and is compatible with agricultural use. The transmission line alignment spans existing irrigation ditches and pivot irrigation in fields to minimize effects to existing productive agricultural operations. Aside from the small footprint of the individual transmission poles, areas under and around Pathway facilities can continue in agricultural use. Per the U.S. Geological Survey National Hydrography Dataset, Pathway does not cross any ditches in El Paso County. If Xcel Energy identifies any such active ditches that will be negatively impacted by Pathway transmission line encroachments, Xcel Energy will supplement this Application with the agreements with the irrigation ditch companies for any encroachment of the Project, but only if such encroachment impacts the carriage of water. Temporary impacts to agricultural activities are expected to be minor and limited to physical disturbance of the land within the footprint of the transmission poles and temporary construction areas (TCAs). Disturbed areas surrounding new transmission poles will be revegetated following construction to a condition reasonably similar to the preconstruction condition. Construction and operation of the transmission line will not interfere with continued use of the surrounding areas for agricultural uses. Xcel Energy will avoid the removal of existing landscaping where possible. Disturbed areas would be returned to preconstruction conditions or reseeded according to landowner requests and El Paso County requirements.

During construction, minimal impacts to natural resources or agricultural lands will occur. Once in operation, Pathway will not create adverse impacts to the existing agricultural uses. After construction, lands can continue in agricultural use, with the exception of the footprint of the individual transmission poles. Areas disturbed during construction will be restored in a manner similar to preconstruction conditions in coordination with the landowners and their current land use.

Scientific studies have evaluated potential impacts to livestock from electric transmission lines. A three-year study was conducted in central Oregon to determine the possible effects of a 500-kV transmission line on cattle and crops; this study found no evidence that continuous exposure to high voltage transmission line affected the production of cattle (Raleigh et. al. 1988 as cited in Central Oregon Agricultural Research Center 1988). A study in Quebec confined 32 pregnant Holstein heifers and exposed them to 30 μT magnetic fields (MFs) and a 12 h light/12 h dark light cycle; this study concluded that the absence of abnormal clinical signs and the absolute magnitude of the significant changes detected during MF exposure, make it plausible to preclude any major animal health hazard (Burchard et. al. 2007). Copies of these studies are included in Attachment R.

2.303(7)(g) Describe the probability that the Project may be significantly affected by earthquakes, floods, fires, snow, slides, avalanches, rockslides or landslides and any measures that will be taken to reduce the impact of such events upon the Project.

At this time, exploratory borings have been drilled along portions of Pathway in El Paso County. Results of the exploratory borings found in the soil boring logs were provided as the Soils & Geology Report document on El Paso County's Electronic Development Application Review Program portal as Attachment: Soils & Geology Report. Xcel Energy continues to work with landowners to finalize pole locations to be able to finalize a geotechnical study prior to construction. Engineers will use this study to determine the size and type of foundations needed to support the transmission line poles. Once this geotechnical study is complete, Xcel Energy can provide a copy to El Paso County, upon request.

No areas of geologic hazards or geologic areas of importance are located near Pathway. No significant natural hazards have been identified in the areas planned for Pathway development in El Paso County. Professional engineers who will guide construction do not foresee any unusual risks. Xcel Energy electric facilities, including transmission poles, are specifically designed for the locations where they are placed. Geotechnical studies are conducted for transmission poles to identify subsurface conditions and determine foundation specifications. Transmission lines are structurally designed according to the NESC, which incorporates standards from the American Society of Civil Engineers on structural loading.

Attachment O includes the National Resources Conservation Service soil report for the Pathway transmission line ROW in El Paso County. Pathway facilities will be located in areas mapped as alluvium and eolian deposits (Attachment O). No significant natural hazards have been identified in the areas planned for Pathway development in El Paso County, including faults and fissures, unstable slopes, landslide areas, rockslide areas,

and avalanche areas, expansive or evaporative soils with the risk of subsidence, and wildfire hazard areas (Attachment G, Attachment O).

The Pathway alignment subject to this Application will cross Federal Emergency Management Agency (FEMA)-designated 100-year floodplains within unincorporated El Paso County associated with Little Horse Creek, Steels Fork Horse Creek, North Fork Horse Creek, Mustang Creek, Horse Creek, West Branch Steels Fork Horse Creek, West Branch, and Pond Creek (see the Water Resources Map, Attachment K). Prior to construction, Xcel Energy will obtain a Floodplain Development Permit for each floodplain crossing from the Pikes Peak Regional Building Department Floodplain Management Office, if necessary.

Proposed mitigation measures to address potential impacts and risks from natural hazards is provided in Attachment W: Monitoring and Mitigation Plan.

2.303(7)(h) Specify if excess service capabilities created by the proposed Project will prove likely to generate sprawl or strip development.

Colorado's Power Pathway supports the state-mandated goal of an 80% reduction in carbon emissions by 2030, which all electric utilities are required to comply with. Colorado has an open transmission system, so Xcel Energy's transmission lines also carry electricity generated by other utilities and cooperatives around the state, benefitting everyone who uses electricity. All transmission providers in Colorado will have access to Colorado's Power Pathway to deliver clean, renewable energy to its customers, who will still be serviced by their current power provider. Because Colorado's open transmission system carries electricity generated by multiple utilities that is distributed to homes and businesses by local power companies, both electric utilities and electricity users around the state benefit from this Project.

Pathway does not anticipate generating sprawl or strip development. Where feasible, the Pathway route through El Paso County is co-located along linear infrastructure, including local roads, distribution lines, and existing infrastructure to minimize impacts to the surrounding area. Approximately 25 miles of the Pathway transmission line in El Paso County are co-located along existing roads and electric transmission infrastructure.

2.303(7)(i) Specify whether the demand for the Project is associated with development within or contiguous to existing service areas.

The purpose of Pathway is to create a network transmission system that can integrate new generation resources needed to meet Colorado's clean energy goals. Pathway is a backbone transmission system that will connect generation sources in eastern Colorado

to demand throughout Colorado. The current electric transmission facilities in the Eastern Plains do not have adequate capacity to meet the forecasted demand. Facilities in El Paso County are part of the larger Pathway that creates a transmission "loop" to provide additional transmission capacity. Pathway will be able to integrate approximately 6,500 megawatts of electric power output from new generation sources.

Colorado's Power Pathway supports the state-mandated goal of an 80% reduction in carbon emissions by 2030, which all electric utilities are required to comply with. Colorado has an open transmission system, so Xcel Energy's transmission lines also carry electricity generated by other utilities and cooperatives around the state, benefitting everyone who uses electricity. All transmission providers in Colorado will have access to Colorado's Power Pathway to deliver clean, renewable energy to its customers, who will still be serviced by their current power provider. Because Colorado's open transmission system carries electricity generated by multiple utilities that is distributed to homes and businesses by local power companies, both electric utilities and electricity users around the state benefit from this Project.

Xcel Energy has limited injection capability at the existing points of interconnection, so the transmission system in eastern and southern Colorado is essentially full. The electric resource zones, where the best resources for wind and solar are located, are very constrained and highly inhibited by the lack of transmission.

Pathway will unlock significant clean energy development opportunities within Colorado's eastern plains. One purpose of Colorado's Power Pathway is for renewable energy developers to have an opportunity to interconnect. Once Colorado's Power Pathway is approved by jurisdictions, there may be an increased interest in developing wind and solar projects within the state.

2.303(8) The applicant shall supply a surface and subsurface drainage analysis.

A Preliminary Drainage Analysis is provided as Attachment L.

2.303(9) Financial Feasibility of the Project

2.303(9)(a) Relevant bond issue, loan and other financing approvals or certifications (ex: approved bond issues; bond counsel opinion).

The average annual rate impact for Xcel Energy's Colorado Energy Plan (Xcel Energy 2024) is 1.5% from 2024-2040, which includes all energy and transmission additions, including Colorado's Power Pathway. Xcel Energy works hard to keep the cost of electricity it provides to its customers as low as possible. The amount we collect from

our customers' bills allows us to maintain our infrastructure and conduct routine maintenance.

A combination of factors determines the eventual cost of constructing a new or upgrading an existing power line. While a straight-line path for a power line may be desirable, factors such as avoidance or mitigation of existing or planned land uses and avoidance or mitigation of environmental conditions affects the overall project design. Other factors, including right-of-way acquisition, also contribute to the siting and eventual costs of a project.

Colorado's Power Pathway will recover the retail share costs through Xcel Energy's Transmission Cost Adjustment Rider included in base rates. The Transmission Cost Adjustment recovers transmission investments not already in base rates and is subject to annual changes to be effective on January 1 of each year. The Colorado Public Utilities Commission oversees all customer electricity rates. Cost for wholesale transmission customers will be set through Federal Energy Regulatory Commission jurisdictional transmission rates.

Pathway is designed to enhance Colorado's electric transmission infrastructure, providing significant benefits to all Colorado residents, including those in El Paso County. Xcel Energy currently owns and operates several high voltage electric transmission lines within El Paso County and provides transmission service to other utilities, including those that directly serve El Paso County homes and businesses. The interconnected nature of the state's electric grid ensures that improvements in transmission capacity and reliability have widespread positive impacts to the state as a whole. Therefore, while El Paso County residents may receive electricity from different local providers that connect to the state's electric grid, Pathway's enhancements to the state's transmission infrastructure offer benefits through improved grid reliability, access to new generation resources, economic opportunities, and support for statewide environmental objectives and requirements.

1. Enhanced Grid Reliability and Resilience:

- Pathway will strengthen Colorado's electric grid, reducing the likelihood of outages and improving the system's ability to handle peak demands. This enhancement benefits all users connected to the grid, regardless of their specific local service provider.

2. Open Access Transmission:

- Colorado operates an open transmission system, allowing various utilities and cooperatives to utilize the transmission infrastructure. This open access ensures that the benefits of enhanced transmission capacity are shared across multiple

service providers, benefiting El Paso County residents through improved grid performance.

- Pathway will provide bulk electric transmission capacity in eastern Colorado and will not change local electric service providers. Pathway will create a network transmission system that can integrate new generation resources needed to meet Colorado's clean energy goals and requirements. Pathway is a backbone transmission system that will connect generation sources in eastern Colorado to demand throughout Colorado. The current electric transmission facilities in the Eastern Plains do not have adequate capacity to meet the forecasted demand. Facilities in El Paso County are part of the larger Pathway that creates a transmission "loop" to provide additional transmission capacity. Pathway will be able to integrate approximately 6,500 megawatts of electric power output from new generation sources.

3. Economic Development and Job Creation:

- The construction and maintenance phases of Pathway are projected to create jobs and stimulate economic activity in El Paso County. This influx can lead to increased demand for local services and generate additional tax revenues, which can be reinvested into community projects and services, contributing to community development and prosperity.

4. Compliance with State Energy Policies:

- Pathway aligns with Colorado's legislative mandates aimed at reducing carbon emissions and promoting renewable energy adoption. By supporting these policies, Pathway contributes to environmental sustainability efforts that benefit all residents of the state.

- Pathway supports the state-mandated goal of an 80% reduction in carbon emissions by 2030, which all electric utilities are required to comply with. Colorado has an open transmission system, so Xcel Energy's transmission lines also carry electricity generated by other utilities and cooperatives around the state, benefitting everyone who uses electricity. All transmission providers in Colorado will have access to Colorado's Power Pathway to deliver clean, renewable energy to its customers, who will still be serviced by their current power provider. Because Colorado's open transmission system carries electricity generated by multiple utilities that is distributed to homes and businesses by local power companies, both electric utilities and electricity users around the state benefit from Pathway. The design and need of Pathway have been approved by the CPUC and represents the use and application of best

technology and industry standards for transmission and transformation of electric energy.

El Paso County will benefit from revenues generated by Pathway in the following ways. Taxing authorities assessing property taxes in El Paso County will receive stable property tax payments on the value of Pathway over its useful life. This includes cities, fire districts, school districts, and other special districts within El Paso County, as well as the County itself. In addition to providing stable tax revenue to these local authorities, this can also benefit all County residents by reducing the need to increase mill levies to collect needed revenues. All users of electricity within the Public Service Company of Colorado Balancing Authority Area, which covers a large percentage of statewide electrical usage and includes customers of rural electric cooperatives served by PSCo's transmission system, will benefit from lower cost energy and increased reliability enabled by Pathway. Investors in Xcel Energy, Inc. common stock and investors in bonds issued by PSCo will have the opportunity to earn a return on the capital provided to finance Pathway at rates authorized by the CPUC. Investors in these publicly traded securities may include El Paso County residents.

2.303(9)(b) Business plan that generally describes the financial feasibility of the Project.

The applicant has both the financial and technical ability to develop and operate Pathway. Per the CPUC's CPCN approval on June 2, 2022, Pathway is deemed to be in the public interest and recovery of the anticipated cost of Pathway is appropriate. The CPCN for Pathway states that Xcel Energy had met its burden of proof. The CPUC evaluated extensive cost and schedule information in arriving at this decision. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and maintained during construction as required, and BMPs will be implemented to address public health, safety, and welfare and in accordance with permit conditions.

The CPUC Decision for a CPCN for Pathway is provided as Attachment S.

Pathway is estimated to cost approximately $1.7 billion and the Sandstone to Harvest Mile segment will cost approximately $250 million. Construction of the Sandstone to Harvest Mile segment will begin in 2025 and be completed in 2027.

2.303(10) Local infrastructure and services impacts. An impact analysis that addresses the manner in which the applicant will comply with the relevant Permit Application Review Criteria. The impact analysis shall include the following information: description of existing capacity of and demand for local government services including but not limited to roads, schools, water and wastewater treatment, water supply, emergency services, transportation, infrastructure, and other services necessary to accommodate the Project within El Paso County.

No new or upgraded public services or facilities are anticipated to be needed to serve Pathway in El Paso County. Xcel Energy is coordinating with Cherokee Metro District to source water during construction activities. The estimated quantity for water during construction of pole foundations is 30,000 gallons per week (150,000 gallons total). The estimated quantity of water required for dust control during construction is 5,000 gallons per week (25,000 gallons total). Impacts to schools, water and wastewater treatment, water supply (other than temporary need for water for Pathway construction), emergency services, transportation, and other local infrastructure are not anticipated as a result of Pathway. In the rare event of a fire emergency, Xcel Energy will likely be aware of an issue before the general public or emergency responders. Nevertheless, the public is encouraged to contact Xcel Energy's emergency number: 800-895-1999. In the event of an outage or equipment failure, the affected equipment is immediately de-energized and Xcel Energy personnel are dispatched to the site. Xcel Energy personnel receive safety training for emergency situations relating to high-voltage electrical equipment. Xcel Energy will coordinate with each Fire District crossed by Pathway in El Paso County. Copies of the Fire District Coordination Letters are provided in Attachment T. See additional discussion of emergency response in Sections 2.303(21) and 2.303(22) of this document.

Where feasible, the Pathway route through El Paso County is co-located along existing infrastructure to minimize impacts to the surrounding area. Approximately 25 miles of the Pathway transmission line in El Paso County are co-located along existing roads and electric transmission infrastructure. Xcel Energy has reviewed the El Paso County Major Transportation Corridors Plan (El Paso County 2016), per Section 5.104(2) of the El Paso County §1041 Regulations. The only roads along the Pathway route in El Paso County that are classified as arterial or expressway are Judge Orr and CO-94. The entirety of the transmission poles along the Pathway route in El Paso County will be further than 105 feet away from the centerline of any County road with a current or proposed classification as arterial or expressway, except to cross such road. At these

crossing locations, the transmission poles will be further than 105 feet from the road centerline.

During construction, temporary impacts to local roads will vary day-by-day as the construction moves along the route. Road closures associated with construction deliveries and normal construction activities are not anticipated. Traffic control measures may be needed during wire pulling activities; Xcel Energy will obtain the necessary permits from El Paso County and from CDOT, as needed, prior to construction. Impacts to school bus routes are not anticipated. Temporary overland access for the transmission line will occur within the acquired Pathway ROW.

A Transportation Memorandum has been developed per feedback provided by Jeff Rice, El Paso County Senior Engineer, and Daniel Torres, El Paso County Senior Engineer, during a virtual meeting held on November 27, 2023, and is provided as Attachment I. Xcel Energy will negotiate a Development Agreement with El Paso County.

2.303(11) Recreational Opportunities. Description of the impacts and net effect of the Project on present and potential recreational opportunities.

No trails, wilderness areas, accessible fishing areas, or parks are located within 5 miles of Pathway in El Paso County (Colorado Department of Natural Resources, et al, 2022; CPW 2022a; CPW 2022b; CPW 2022c; CPW 2022d; USDA 2022; El Paso County 2022).

The Brett Gray Ranch State Trust Land (STL) is located approximately 2.5 miles east of Pathway. The Brett Gray Ranch STL is a 50,000-acre ranch currently leased and managed by Round River Resource Management from the Colorado State Land Board (Round River 2022). In addition, Steel Fork Pheasants, LLC is a 10,000 acre bird hunting area located approximately 2.5 miles east of Pathway (Steel Fork Pheasants 2022).

No recreational resources, including powerline trails, are proposed as a part of Pathway. During construction and operation, Pathway will not impact access to Brett Gray Ranch STL or Steel Fork Pheasants, LLC or any recreational activities.

2.303(12) Areas of Paleontological, Historic or Archaeological Importance. Description of the impacts and net effect of the Project on sites of paleontological, historic or archaeological interest.

A desktop cultural resources review was completed in December 2022 and is included in Attachment V, Cultural Resource Desktop Review for Colorado's Power Pathway in El Paso County. Cultural resource records were reviewed using archaeological site files and the Colorado Cultural Resource Online Database (Compass) maintained by the Colorado Historical Society Office of Archaeology & Historic Preservation. Included in the Compass database are records of properties listed in the National Register of Historic Places (NRHP). The cultural resources site file search was conducted for a 150-foot buffer of the transmission line ROW within El Paso County (the Research Area).

Within the Research Area, three (3) previous cultural resource surveys have been conducted (report numbers EP.SC.NR21, MC.E.NR11, and MC.FH.R1). These surveys briefly intersect Segment 5.

Within the Research Area is one (1) previously recorded cultural resource. This resource is a prehistoric isolated find (5EP.6331). This site has been recommended Not Eligible. This site is not within the transmission line ROW itself but is within the 150-foot buffer of the transmission line ROW.

Isolated finds must meet certain requirements to be found eligible for listing in the NRHP. This isolated find does not meet these requirements. The transmission line will not have an adverse effect on any cultural resources.

An Unanticipated Discovery Protocol has been developed and will be implemented during construction (see Attachment V, Cultural Resource Desktop Review for Colorado's Power Pathway in El Paso County).

2.303(13) Nuisance. Descriptions of noise, glare, dust, fumes, vibration, and odor levels anticipated to be caused by the Project.

Nuisance glare, vibrations, or odors are not anticipated during construction of Pathway. During construction, noise, dust, and fumes will be generated, typical of construction activities.

Construction-related noise will result in temporary short-term increases in noise in areas where construction and staging are taking place. Short-term noise will result during

foundation construction and the assembly and erection of transmission line poles. Short-term noise is anticipated from construction equipment such as auguring machines, cranes, heavy machinery, helicopters, and trucks. The construction plan does not currently call for the use of helicopters within El Paso County for stringing the conductor wire. If helicopters are utilized during construction, their use would be for a limited duration as required for stringing the conductor wire. Construction vehicles and equipment will be maintained in proper operating condition and equipped with manufacturer's standard noise control devices (e.g., mufflers or engine enclosures). Construction activities will comply with the maximum permissible noise levels for construction activities specified in Section 5 of the El Paso County Noise Ordinance (El Paso County 2002). Short-term, temporary increases in fugitive dust and construction equipment exhaust (fumes) are anticipated during construction activities. These are not expected to cause a public nuisance. Water trucks will be utilized during construction activities around roadway access points to suppress dust from vehicles and equipment as necessary within the ROW and county roads as per coordination with El Paso County. Xcel Energy will apply for a CDPHE APEN for land development prior to construction and follow state standards to control the release of fugitive dust related to construction, if necessary. The APEN will be required for a disturbance greater than 25 contiguous acres and land development activities longer than 6 months.

Nuisance glare, dust, fumes, vibrations, or odors are not anticipated during operation of Pathway. During operations, indirect noise effects, which include the noise from transmission line inspections and maintenance activities, are anticipated to be negligible because of their short duration and infrequency. Under certain conditions, the localized electric field near an energized conductor can be sufficiently concentrated to produce a tiny electric discharge that can ionize air close to the conductors; this partial discharge of electrical energy is called corona discharge, or corona (Electric Power Research Institute 1982). All high-voltage transmission lines experience significant corona during wet weather, when water droplets form on the line. In normal, fair weather conditions, corona and its corresponding audible noise are usually at low levels (approximately 25 decibels less than wet weather noise). Corona also increases approximately 1 decibel for every 1,000 feet in elevation gain.

Xcel Energy is required to meet state standards as outlined in 4 Code of Colorado Regulations (CCR) 723-3. The CPUC provides reasonableness determinations associated with noise and requires CPCN applicants to evaluate the expected level of noise of the proposed transmission facilities. Based on the Noise and Electric and Magnetic Fields (EMF) Study conducted for Pathway (Attachment E), the maximum projected noise level measured at 25 feet from the edge of the ROW is 49.8 A-weighted decibels (dBA). Per CPUC Rule 3206(f), noise levels below 50 dBA are not subject to further review (4 CCR 723-3). The projected noise and EMF levels from the Pathway

transmission line were deemed reasonable by the CPUC and not subject to further review. The CPUC Decision Regarding CPCN and Noise and Magnetic Field Reasonableness is included as Attachment S.

Scientific studies have evaluated potential impacts to livestock from electric transmission lines. A three-year study was conducted in central Oregon to determine the possible effects of a 500-kV transmission line on cattle and crops; this study found no evidence that continuous exposure to the high voltage transmission line affected the production of cattle (Raleigh et. al. 1988 as cited in Central Oregon Agricultural Research Center 1988). A study in Quebec confined 32 pregnant Holstein heifers and exposed them to 30 μT MFs and a 12 h light/12 h dark light cycle; this study concluded that the absence of abnormal clinical signs and the absolute magnitude of the significant changes detected during MF exposure, make it plausible to preclude any major animal health hazard (Burchard et. al. 2007). Copies of these studies are included in Attachment R.

Transmission line operations will not require on-site staff and will be monitored remotely. Visits from personnel will be limited to emergencies or maintenance and inspection activities. As a result, increased dust or exhaust are not expected during operations.

2.303(14) Air Quality. Description of the impacts and net effect that the Project would have on air quality during both construction and operation, and under both average and worst case conditions, considering particulate matter and aerosols, oxides, hydrocarbons, oxidants, and other chemicals, temperature effects and atmospheric interactions.

El Paso County is in attainment with National Ambient Air Quality Standards for the following criteria pollutants: particulate matter, carbon monoxide, ozone, nitrogen oxides, sulfur dioxide, and lead (EPA 2022).

Short-term effects are anticipated from a temporary increase in construction vehicles, which may increase construction equipment exhaust (fumes), and clearing and preparing areas for construction (fugitive dust). The short-term effects are not expected to degrade air quality.

Xcel Energy will apply for a CDPHE APEN for land development prior to construction and follow state standards to control the release of fugitive dust related to construction, if necessary. The APEN will be required for a disturbance greater than 25 contiguous acres and land development activities longer than 6 months.

It is anticipated that up to 30 trucks per day will be utilized during construction of the transmission line. Impacts to local roads will vary day-by-day as the construction moves along the route. Concrete truck deliveries will be made daily when the foundations are constructed. Multiple deliveries of concrete (up to 30 per day) will be required daily at certain stages of construction. Water trucks will be utilized during construction activities to suppress dust from vehicles and equipment as necessary.

During operation, Pathway will not generate trips in excess of those currently experienced as the transmission line will not be staffed. The transmission line will not require on-site staff and will be monitored remotely. Visits from personnel will be limited to emergencies or maintenance and inspection activities and increased fumes, exhaust and dust during operation is not expected.

2.303(15) Visual Quality. Description of the impacts and net effect that the Project would have on visual quality, considering viewsheds, scenic vistas, unique landscapes or land formations within view of the Project area.

The existing visual landscape in the area around the proposed Pathway facilities consists of primarily agricultural land uses including pastureland. Trees are sparse and grassland/herbaceous and shrub/scrub land cover dominate the area. Industrial facilities present near Pathway facilities include oil and gas wells, wind turbines, communication facilities, and oil and gas pipelines. Electric distribution lines are visible throughout the area and are generally located along roads to serve residential and commercial areas. There are several existing high voltage transmission lines in El Paso County (HIFLD 2022). Other linear infrastructure, including local roads exist in proximity to Pathway. Where feasible, the Pathway route through El Paso County is co-located along this existing infrastructure to minimize impacts to the surrounding area. Approximately 25 miles of the Pathway transmission line in El Paso County are co-located along existing roads and electric transmission infrastructure. The transmission line will be visible to viewers with direct, open views. Viewers located farther away are likely to experience less visual impact because the existing screening (topography, vegetation, buildings) and distance from the facilities will decrease potential views.

The Pathway route through El Paso County is largely co-located along road rights-of-way to reduce visual impacts. The type of steel used will be weathering steel that oxidizes to resemble a natural brown look and is not shiny. Visual impacts of the transmission line will vary based on proximity and with distance, the scale of the transmission line poles will be minimized. The visual landscape along the route features existing transmission lines, roadways, and industrial elements, and Pathway will result

in an incremental increase in facilities in the viewshed. Pole Details, Representative Photographs, and Simulations are included in Attachment J.

Existing undisturbed trees, shrubs, and native vegetation will be preserved to the extent possible to maintain visual contrast in the landscape. Following construction, the ROW will be restored in a manner similar to pre-construction conditions.

2.303(16) Surface Water Quality

A desktop analysis of the portion of Pathway within El Paso County was completed to identify potentially jurisdictional wetlands and other Waters of the U.S. (WOTUS) that may be subject to regulation under Section 404 of the Clean Water Act (CWA). The following digital information was evaluated for the 150-foot ROW and an additional 50-foot buffer on either side of the ROW (Study Area):

- USFWS National Wetland Inventory (NWI) dataset (USFWS 2022a)
- U.S. Geological Survey (USGS) National Hydrography Dataset (NHD; USGS 2022a)
- Playa Lakes Joint Venture (PJLV) Probable Playa Dataset (PLJV 2019)

The Water Resources Map (Attachment K) illustrates the mapped NWI, NHD, and PLJV locations near Pathway in El Paso County. The notable NHD-mapped drainages associated with wetland and other WOTUS features near proposed Pathway facilities in El Paso County include Little Horse Creek, West Branch Steels Fork Horse Creek, West Branch, Pond Creek, North Fork Horse Creek, Steels Fork Horse Creek, Mustang Creek, Horse Creek, and associated unnamed tributaries (USGS 2022a). NWI-mapped wetland features associated with these drainages include riverine wetlands, a freshwater emergent wetland, and a freshwater pond. As outlined in Table 4, the transmission line ROW intersects 21 of these mapped wetland features, the longest crossing of which is approximately 839 feet (USFWS 2022a). One PLJV-mapped playa (0.2 acre) is located within the Pathway ROW; it is located southeast of Ramah, Colorado in the northeast portion of El Paso County (PLJV 2019).

Table 4: NWI Wetland Length Crossed by the Transmission Line in El Paso County

NWI Wetland Type	Approximate Length Crossed (Feet)
Freshwater Pond	40
Riverine	19
Riverine	27
Riverine	24
Riverine	20
Riverine	211

NWI Wetland Type	Approximate Length Crossed (Feet)
Riverine	41
Riverine	25
Riverine	20
Riverine	45
Riverine	20
Riverine	20
Riverine	21
Riverine	55
Riverine	20
Riverine	20
Riverine	97
Riverine	62
Riverine	278
Riverine	860
Riverine	65
Riverine	33

Pathway intends to avoid impacts to wetlands and WOTUS features (including the mapped playa) to the extent practicable. The potential wetlands and WOTUS identified through desktop analysis of NWI data that may be impacted by construction of Pathway will be verified in the field and inventoried and/or delineated to determine the actual locations and extent of wetlands prior to construction of Pathway. The span between transmission line poles can be up to 1,400 feet, and thus can be sited to avoid pole placement within and to span across wetlands and other WOTUS features to avoid permanent impacts. Based on the lengths provided in Table 4, it is not anticipated that Pathway will result in any permanent impacts to wetlands or other WOTUS features in El Paso County. Associated access roads, laydown yards, and other appurtenant features of Pathway will also be sited to avoid permanent impacts to wetlands and WOTUS features. In the event that a regulated water resource cannot be avoided, Pathway will comply with applicable federal and state regulations, including permit requirements under Section 404 of the CWA.

Temporary impacts to wetlands and WOTUS during construction of Pathway will be avoided to the extent practicable. If wetlands cannot be avoided, matting and other protective temporary measures will be used. Depending on the condition of the wetland soil and hydrology, matting may be used in some cases to protect wetlands from rutting. To avoid potential indirect impacts from construction-related erosion and sediment movement during construction, Pathway will adhere to erosion and sediment control BMPs outlined in the SWMP, which will include erosion control and revegetation measures.

Pathway will not generate pollutant loads. Construction of the transmission line will not create runoff in excess of previous site levels and will not change existing topography or adversely affect drainage. No alteration in the pattern or intensity of surface drainage as a result of construction or operation of the transmission line will occur.

Xcel Energy will coordinate with El Paso County as appropriate. Xcel Energy will comply with permit application requirements, County standards, and construction protocol to ensure that Pathway does not violate water quality standards. Prior to construction, a Construction Stormwater Discharge Permit for Construction Activities will be obtained from CDPHE.

The Water Resources Resource Map (Attachment K) also illustrates the mapped FEMA floodplain data available for El Paso County. Pathway will avoid regulated floodplains to the extent practicable. The transmission line will span floodplain areas with overhead conductors. Pathway will obtain a Floodplain Development Permit for each floodplain crossing from the Pikes Peak Regional Building Department Floodplain Management Office, if necessary. See Section 2.303(19) of this document for additional information regarding floodplains.

2.303(16)(a) Map and/or description of all surface waters relevant to the Project, including description of provisions of the applicable regional water quality management plan, and NPDES Phase II Permit and necessary El Paso County Erosion and Stormwater Quality Control Permit ("ESQCP"), Section 404 Federal Clean Water Act Permit that applies to the Project and assessment of whether the Project would comply with those provisions.

A map showing water resources within the vicinity of Pathway is provided as Attachment K. The transmission line subject to this permit to locate and construct major facilities of a public utility (1041 Permit) Application (Application) will cross Little Horse Creek, Steels Fork Horse Creek, North Fork Horse Creek, Mustang Creek, Horse Creek, West Branch Steels Fork Horse Creek, West Branch, Pond Creek, and unnamed tributaries in El Paso County.

2.303(16)(b) Existing data monitoring sources.

Pathway does not anticipate impacts to surface waters; as such, there is no existing data monitoring sources.

2.303(16)(c) Descriptions of the immediate and long-term impact and net effects that the Project would have on the quantity and quality of surface water under both average and worst case conditions.

To avoid potential indirect impacts from construction-related erosion and sediment movement during construction, Pathway will adhere to best management practices outlined in the SWMP, which will include erosion and sediment control best management practices and revegetation measures.

2.303(17) Groundwater Quality

2.303(17)(a) Map and/or description of all groundwater, including any and all aquifers relevant to the Project. At a minimum, the description should include:

2.303(17)(a)(i) Seasonal water levels in each portion of the aquifer affected by the Project.

2.303(17)(a)(ii) Artesian pressure in said aquifers.

2.303(17)(a)(iii) Groundwater flow directions and levels.

2.303(17)(a)(iv) Existing aquifer recharge rates and methodology used to calculate recharge to the aquifer from any recharge sources.

2.303(17)(a)(v) For aquifers to be used as part of a water storage system, methodology and results of tests used to determine the ability of the aquifer to impound groundwater and aquifer storage capacity.

2.303(17)(a)(vi) Seepage losses expected at any subsurface dam and at stream-aquifer interfaces and methodology used to calculate seepage losses in the affected streams, including description and location of measuring devices.

2.303(17)(a)(vii) Existing groundwater quality and classification.

2.303(17)(a)(viii) Location of all water wells potentially affected by the Project and their uses.

Construction and operation of Pathway is not anticipated to impact existing groundwater quality or quantity, or groundwater rights for agricultural uses. Pathway will not require water rights for construction or operation and will not affect existing water rights.

Pathway will not require permanent drawing out of a well or aquifer. Water to be used during construction will be obtained from a local, permitted source. No impacts to groundwater are anticipated. BMPs will be used during construction to control sediment and runoff from work areas. Compliance with applicable federal, state and county construction and waste management procedures will prevent accidental spills or runoff of sediment or contaminants to groundwater.

2.303(17)(b) Description of the impacts and net effect of the Project on groundwater.

Impacts to groundwater wells are not anticipated. The Water Wells Map in the Routing and Siting Study for Segment 5 (Attachment C) provides mapping and discussion of the consideration of water wells during the siting process for Pathway. Prior to construction and during the Pathway planning and design stages, soil borings will be taken to understand the sub-surface conditions where Pathway facilities will be built. During the design stages of the Project, if it is determined that a pole foundation has potential to affect a water well, Xcel Energy will evaluate options to avoid or mitigate impacts to these wells.

2.303(18) Water Quantity

2.303(18)(a) Map and/or description of existing stream flows and reservoir levels relevant to the Project.

A map showing water resources within the vicinity of Pathway is provided as Attachment K. Pathway will not impact stream flows or reservoir levels of local waterbodies.

2.303(18)(b) Map and/or description of existing minimum stream flows held by the Colorado Water Conservation Board.

There are no in-channel or in-lake uses anticipated as a result of Pathway.

2.303(18)(c) Descriptions of the impacts and net effect that the Project would have on water quantity.

A permanent water supply will not be required for Pathway and no impacts to existing water rights are anticipated. Water to be used during construction will be obtained from a local, permitted source. Xcel Energy is coordinating with Cherokee Metro District to source water during construction activities. The estimated quantity for water during construction of pole foundations is 30,000 gallons per week (150,000 gallons total). The estimated quantity of water required for dust control during construction is 5,000 gallons per week (25,000 gallons total). Pathway will not require water use during operation.

2.303(18)(d) Statement of methods for efficient utilization of water, including recycling and reuse.

Water may be used in concrete production, dust suppression, and compaction activities. Water to be used during construction will be obtained from a local, permitted source. Pathway will not require water use during operation.

2.303(19) Floodplains, Wetlands and Riparian Areas: Terrestrial and Aquatic Animals, Plant Life and Habitat. Applicant shall only provide description of foregoing natural conditions, animal and plant life at, but not to exceed, the level of detail required by other federal or state Permits or reviews which are applicable to the Project.

Wetlands and Riparian Areas

Pathway intends to avoid impacts to wetlands and WOTUS features (including the mapped playa) to the extent practicable. The potential wetlands and WOTUS identified through desktop analysis of NWI data that may be impacted by construction of Pathway will be verified in the field and inventoried and/or delineated to determine the actual locations and extent of wetlands prior to construction of Pathway. The span between transmission line poles can be up to 1,400 feet, and thus can be sited to avoid pole placement within and to span across wetlands and other WOTUS features to avoid permanent impacts. Based on the lengths provided in Table 4 in Section 2.303(16) of this document, it is not anticipated that Pathway will result in any permanent impacts to wetlands or other WOTUS features in El Paso County. Associated access roads, laydown yards, and other appurtenant features of Pathway will also be sited to avoid permanent impacts to wetlands and WOTUS features. In the event that a regulated water resource cannot be avoided, Pathway will comply with applicable federal and state regulations, including permit requirements under Section 404 of the CWA.

Temporary impacts to wetlands and WOTUS during construction of Pathway will be avoided to the extent practicable. If wetlands cannot be avoided, matting and other protective temporary measures will be used. Depending on the condition of the wetland soil and hydrology, matting may be used in some cases to protect wetlands from rutting. To avoid potential indirect impacts from construction-related erosion and sediment movement during construction, Pathway will adhere to erosion and sediment control BMPs outlined in the SWMP, which will include erosion control and revegetation measures.

Additional information on wetlands and riparian areas is provided in Section 2.303(16) of this document.

Floodplains

A map showing water resources within the vicinity of Pathway is provided as Attachment K. The transmission line subject to this 1041 Application will cross floodplains associated with Little Horse Creek, Steels Fork Horse Creek, North Fork Horse Creek, Mustang Creek, Horse Creek, West Branch Steels Fork Horse Creek, West Branch, and Pond Creek in El Paso County. Pathway will avoid regulated floodplains to the extent practicable. The transmission line will span floodplain areas with overhead conductors. As such, no impacts to floodplains are anticipated. Pathway will obtain a Floodplain Development Permit for each floodplain crossing from the Pikes Peak Regional Building Department Floodplain Management Office, if necessary. Table 5 notes the floodplain areas spanned by Pathway in El Paso County.

Table 5: Floodplain Areas Spanned by Pathway

Flood Zone	Length (feet)
Zone A (100-Year Floodplain)	341.2
Zone A (100-Year Floodplain)	943.2
Zone A (100-Year Floodplain)	2,107.4
Zone A (100-Year Floodplain)	596.1
Zone A (100-Year Floodplain)	1,721.4
Zone A (100-Year Floodplain)	849.5
Zone A (100-Year Floodplain)	1,237.6
Zone A (100-Year Floodplain)	907.4
Zone A (100-Year Floodplain)	982.4
Zone A (100-Year Floodplain)	574.5
Zone A (100-Year Floodplain)	1,193.6
Zone A (100-Year Floodplain)	825.6

Terrestrial and Aquatic Animals, Plant Life, and Habitat

A desktop analysis of the portion of Pathway within El Paso County was completed to characterize the environmental setting of Pathway and evaluate the potential for occurrence of special-status species based on available habitat. The analysis included the transmission line route plus a 1-mile buffer. The 1-mile buffer was used to evaluate biological resources that could be influenced by project construction or operation (e.g., raptor nests). To assess the potential for occurrence of special-status species within the county, the following publicly available information was reviewed:

- Google Earth Aerial Imagery (Google 2022)

- National Land Cover Database (NLCD 2019)
- USFWS Information for Planning and Consultation (IPaC) online tool (USFWS 2022b)
- USFWS Critical Habitat Portal (USFWS 2022c)
- Colorado Natural Heritage Program Species Elements Database (CNHP 2022)
- CPW Species Activity Mapping Data (CPW 2022e)
- CPW State Species List (CPW 2022f)
- Online species profiles and distribution information (CPW 2022g)

In addition to publicly available information, a windshield survey of proposed Pathway facility locations was completed in September 2021 to identify any potential areas of concern for biological resources. Ground-based raptor nest surveys and aerial raptor nest surveys were conducted in April and May 2022 to identify potentially active eagle and other raptor nests within 0.5-mile of the proposed transmission line route.

The USFWS IPaC online tool and CPW online databases were used to identify federally and state-protected species that may occur near Pathway facilities in El Paso County, including species listed or proposed for listing under the Endangered Species Act, bald and golden eagles protected under the Bald and Golden Eagle Protection Act, and state-listed threatened or endangered species (CPW 2022e, CPW 2022f, CPW 2022g, CNHP 2022, USFWS 2022a, USFWS 2022b). In addition to the federally and state-listed species that receive regulatory protection, state Species of Concern (SC) were also evaluated. Although SC species do not receive any regulatory protection, they have been identified by the state as having management interest either due to declining populations or habitat loss.

The Wildlife Species Habitat and Avian Habitat Resource Maps in the Routing and Siting Study for Segment 5 (Attachment C) illustrate mapped special-status wildlife and avian habitat for Pathway in El Paso County. A total of 16 special-status wildlife species were identified as potentially occurring within 1 mile of proposed Pathway facilities in El Paso County. Table 6 outlines the likelihood of occurrence of each species based upon review of known species ranges, habitat requirements, land cover data, and aerial imagery. Preble's Meadow Jumping Mouse habitat has not been identified within 1 mile of proposed Pathway facilities in El Paso County.

Table 6: Special-Status Species Potentially Occurring within 1 Mile of Proposed Pathway Facilities in El Paso County

Common Name	Scientific Name	Federal/ State Status[1]	Habitat Associations/ Range	Likelihood of Occurrence[2]
Mammals				
Black-tailed prairie dog	*Cynomys ludovicianus*	- / SC	Occurs in the eastern third of Colorado, in shortgrass prairie habitat below 6,000 feet elevation. The species lives in colonies and they construct burrows where they live and raise their young. 1-mile buffer of proposed Pathway facilities is within the overall species range, low, medium and high potential colony occurrence area.	High
Gray wolf	*Canis lupus*	FE / -	Requires large areas of contiguous habitat, including forests and mountain terrain, with an abundance of prey and cover. The species has been considered extirpated from Colorado until very recently.	Unlikely
Swift fox	*Vulpes velox*	- / SC	Occurs in shortgrass prairie habitat with flat or rolling terrain and high visibility over long distances, up to 7,000 feet elevation. 1-mile buffer of proposed Pathway facilities is within the overall species range.	Moderate
Birds				
Bald eagle	*Haliaeetus leucocephalus*	BGEPA / SC	Large rivers, lakes, and reservoirs with an abundance of fish. Nesting is typically in large trees close to water. 1-mile buffer of proposed Pathway facilities within overall species range.	Moderate
Eastern black rail	*Laterallus jamaicensis ssp. jamaicensis*	FT / -	Occurs in freshwater marshes and wetlands (Arkansas River). 1-mile buffer of proposed Pathway facilities is outside range for the species.	Unlikely
Ferruginous hawk	*Buteo regalis*	- / SC	Occurs in arid and open habitats including grasslands, sagebrush or saltbush plains, and deserts. Nests in lone trees, cliffs, rock outcrops, or on the ground in a high area like a knoll. 1-mile buffer of proposed Pathway facilities within species breeding range.	High

Common Name	Scientific Name	Federal/ State Status[1]	Habitat Associations/ Range	Likelihood of Occurrence[2]
Golden eagle	*Aquila chrysaetos*	BGEPA / -	Open native habitats with an abundance of prey. Nesting occurs on cliffs, knolls, and raised areas. 1-mile buffer of proposed Pathway facilities within overall species range.	Moderate
Mountain plover	*Charadrius montanus*	- / SC	Occurs in shortgrass prairie habitat, nesting in sparsely vegetated areas or areas with barren open ground, and often found near prairie dog colonies. 1-mile buffer of proposed Pathway facilities is within species breeding range.	Moderate
Piping plover[3]	*Charadrius melodus*	FT / ST	Reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation. 1-mile buffer of proposed Pathway facilities outside range for the species.	Unlikely – No downstream impacts anticipated.
Western burrowing owl	*Athene cunicularia hypugaea*	- / ST	Open habitats with low or sparse vegetation on gently sloping terrain. Nesting typically occurs in small mammal burrows. Often found nesting in the perimeters of prairie dog colonies. 1-mile buffer of proposed Pathway facilities occurs in species breeding range, low, medium and high potential prairie dog colony occurrence area.	Moderate
Whooping crane[3]	*Grus americana*	FE / SE	Freshwater marshes, wet prairies, shallow lakes, and lagoons. 1-mile buffer of proposed Pathway facilities outside range for the species.	Unlikely – No downstream impacts anticipated.
Fish				
Greenback cutthroat trout	*Oncorhynchus clarkii stomias*	FE / ST	Endemic to the headwaters of the South Platte and Arkansas River drainages on the eastern slope of the Rocky Mountains. 1-mile buffer of proposed Pathway facilities outside range for the species.	Unlikely

Common Name	Scientific Name	Federal/ State Status[1]	Habitat Associations/ Range	Likelihood of Occurrence[2]
Pallid sturgeon[3]	*Scaphirhynchus albus*	FE / -	Large river systems with firm sandy bottoms (i.e., Missouri River). 1-mile buffer of proposed Pathway facilities outside range for the species.	Unlikely – No downstream impacts anticipated.
Reptiles				
Massasauga	*Sistrurus catenatus*	- / SC	Occurs wet areas including wet prairies, marshes, sedge meadows, and low areas along rivers and lakes. 1-mile buffer of proposed Pathway facilities within overall species range and potential habitat.	Moderate
Insects				
Monarch butterfly	*Danaus plexippus*	FC / -	Found in a wide variety of habitats and are known to occur in grasslands and prairie habitats in Colorado. The species requires milkweed (*Asclepias* spp.) host plants to lay their eggs.	Moderate
Plants				
Ute ladies'-tresses orchid	*Spiranthes diluvialis*	FT / -	Moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet.	Low

1 FC = Federal Candidate, FE = Federally Endangered, FT = Federally Threatened, ST = State Threatened, SE = State Endangered, SC = Species of Concern, BGEPA = Bald and Golden Eagle Protection Act

2 Likelihood of Occurrence: Unlikely–unsuitable habitat in project and vicinity; Low–marginally suitable habitat in project and vicinity; Moderate–suitable habitat present in project, or species known to occur in habitat similar to project; High–highly suitable habitat present in project, or known populations exist in project vicinity.

3 Platte River Species = Water-related activities or uses in the Platte River Basins may affect these species in downstream reaches.

In addition to listed species, CPW tracks and maps data for big game species habitat throughout the state (CPW 2022e). The Wildlife Species Habitat Resource Maps in the Routing and Siting Study for Segment 5 (Attachment C) illustrate mapped big game habitat in El Paso County. The 1-mile buffer of the proposed Pathway facilities is located within four mule deer (*Odocoileus hemionus*) concentration areas, one area identified as severe winter range, one area identified as winter concentration area and two areas identified as winter range. One pronghorn antelope (*Antilocapra americana*) concentration area occurs within the 1-mile buffer of proposed Pathway facilities. One white-tailed deer (*Odocoileus virginianus*) concentration area and one area identified as winter range occur within the 1-mile buffer of proposed Pathway facilities. No other big game species habitat is mapped in the same area.

Potential impacts to wildlife species would primarily be associated with temporary disturbance from construction activities within the ROW, namely the removal and management of vegetation. In addition, increased noise and equipment movement during construction may temporarily displace mobile wildlife species from the immediate workspace area. These impacts are considered short-term in duration and normal wildlife movements would be expected to resume after construction has been completed and disturbed areas have been restored in a manner generally similar to preconstruction conditions.

To avoid or minimize impacts to wildlife, Pathway will implement measures such as requiring proper trash and food debris disposal and compliance with posted speed limits. CPW recommendations (CPW 2021) will be incorporated where practicable.

Vegetation clearing during migratory bird breeding season (generally April 15 through September 1) could impact active nests by disturbing or destroying them, resulting in fatalities of adults, eggs, and/or young. Additionally, lighting, construction noise, and vibration in the immediate vicinity of active nests, could potentially result in nest failure or abandonment. To avoid these potential impacts, Pathway has been sited to avoid known eagle nest and roost locations to the extent practicable. Operation of Pathway could result in direct impacts to raptor species through electrocution and/or collision. In addition, electrical components of the transmission lines will be separated to minimize the risk of avian contact and will follow APLIC guidelines (APLIC 2006). Bird flight or swan diverters or other marking devices may be used as determined necessary for specific locations.

To avoid or minimize potential project impacts to migratory birds and raptors, including eagles, Pathway will conduct tree/vegetation clearing during the nonbreeding season for birds (September 1–April 15), if feasible. If vegetation clearing cannot occur during the nonbreeding season, vegetation clearance surveys, nest surveys, and burrowing owl surveys may be conducted per USFWS and CPW guidance to identify avian nesting

activity and determine appropriate avoidance buffers (CPW 2020, CPW 2021) or monitor active nest sites until determined to be inactive.

Pathway has been conducting ongoing coordination with CPW and USFWS regarding potential biological resources that may be impacted by Pathway, as described in Table 2 in Section 2.303(6)(c) of this document. Pathway had a project introduction meeting with CPW on December 12, 2021, followed by a routing workshop on January 10, 2022, and a follow-up routing discussion on April 22, 2022. On May 9, 2022, Pathway had a project introduction meeting with USFWS. The feedback received from CPW and USFWS during these meetings has been used to inform the routing and siting of Pathway. The Pathway team has coordinated with USFWS and CPW on threatened and endangered species, as applicable. Pathway will continue to coordinate with CPW and USFWS through permitting, construction, and operation of the project, as needed, to ensure compliance with all applicable federal and state regulations.

2.303(20) Soils, Geologic Conditions and Natural Hazards

2.303(20)(a) Map and/or description of soils, geologic conditions, and natural hazards including but not limited to soil types, drainage areas, slopes, avalanche areas, debris fans, mud flows, rock slide areas, faults and fissures, seismic history, and wildfire hazard areas, all as relevant to the Project area.

A map of soils, geologic conditions, and natural hazards is included in Attachment G. No areas of geologic hazards or natural hazards are located near Pathway.

2.303(20)(b) Descriptions of the risks to the Project from natural hazards.

No areas of geologic hazards or natural hazards are located near Pathway (Attachment G). No significant natural hazards have been identified in the areas planned for Pathway development in El Paso County. Professional engineers who will guide construction do not foresee any unusual risks. Xcel Energy electric facilities, including transmission poles, are specifically designed for the locations where they are placed. Geotechnical studies are conducted for transmission poles to identify subsurface conditions and determine foundation specifications. Transmission lines are structurally designed according to the NESC, which incorporates standards from the American Society of Civil Engineers on structural loading.

Attachment O includes the National Resources Conservation Service soil report for the Pathway transmission line ROW in El Paso County. Pathway facilities will be located in areas mapped as alluvium and eolian deposits (Attachment O). No significant natural

hazards have been identified in the areas planned for Pathway development in El Paso County, including faults and fissures, unstable slopes, landslide areas, rockslide areas, and avalanche areas, expansive or evaporative soils with the risk of subsidence, and wildfire hazard areas (Attachment G, Attachment O).

Xcel Energy's substations and powerlines are monitored and controlled remotely from an operations center where event response is coordinated. In the rare event of an emergency, Xcel Energy will likely be aware of an issue before the general public or emergency responders. Nevertheless, the public is encouraged to contact Xcel Energy's emergency number: 800-895-1999 to report an emergency. Unauthorized personnel, including emergency responders, should not approach the facilities and should not touch the electric lines or anyone or anything in contact with them. In the event of an outage or transformer failure, the affected substation equipment is immediately de-energized by the breaker equipment and Xcel Energy personnel are dispatched to the site. Xcel Energy personnel receive safety training for emergency situations relating to high-voltage electrical equipment. Xcel Energy also coordinates closely with local fire departments and first responders and consults with them to discuss any concerns within their response area. Xcel Energy will coordinate with each Fire District crossed by Pathway in El Paso County. Copies of the Fire District Coordination Letters are provided in Attachment T. As necessary, Xcel Energy construction crews will coordinate with first responders in El Paso County. Xcel Energy offers free online safety training to fire departments and first responders that is based on national standards through the Responding to Utility Emergencies Program. Xcel Energy's Emergency Response Procedures are provided as Attachment H.

2.303(20)(c) Descriptions of the impacts and net effect of the Project on soil and geologic conditions in the area.

A geotechnical study, based on soil borings along the length of the transmission line will be conducted for Pathway. Engineers will use the study to determine the size and type of foundations needed to support transmission line poles as well as soil resistivity. Professional engineers will guide construction and do not foresee any unusual risks.

2.303(21) Hazardous Materials

2.303(21)(a) Description of all solid waste, hazardous waste, petroleum products, hazardous, toxic, and explosive substances to be used, stored, transported, disturbed or produced in connection with the Project, including the type and amount of such substances, their location, and the practices and procedures to be implemented to avoid accidental release and exposure.

Chemicals that may be used during construction and operation are those found in diesel fuel, gasoline, coolant (ethylene glycol), and lubricants in machinery. Hazardous materials will not be drained onto the ground or into streams or drainage areas. Enclosed containment will be provided for trash disposal. Construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, will be removed and taken to a disposal facility authorized to accept such materials. No hazardous materials will be permanently used, stored, or generated on site of Pathway facilities. Pathway will not require transportation of hazardous materials.

Construction, operation, and maintenance activities will comply with applicable federal, state, and local laws and regulations regarding the use of hazardous substances. Construction activities will be performed by methods that prevent entrance or accidental spillage of solid matter, contaminants, debris, and other pollutants and wastes into flowing streams or dry watercourses, lakes, and underground water sources. All activities will follow BMPs for the management of wastes to avoid and minimize effects from potential spills or other releases to the environment.

Xcel Energy will coordinate with each Fire District crossed by Pathway in El Paso County (the Big Sandy, Edison, and Tri County Fire Districts). Copies of the Fire District Coordination Letters are provided in Attachment T.

2.303(21)(b) Location of storage areas designated for equipment, fuel, lubricants, and chemical and waste storage with an explanation of spill containment plans and structures.

Temporary Construction Areas (TCAs) will be used during construction to stage construction equipment and materials. No hazardous materials will be permanently used, stored, or generated on site of Pathways facilities. Hazardous materials used during construction and operation will be used and disposed of in compliance with all applicable federal, state, and local regulations. Enclosed containment will be provided for trash disposal. Construction waste, including trash and litter, garbage, other solid

waste, petroleum products, and other potentially hazardous materials, will be removed and taken to a disposal facility authorized to accept such materials.

Xcel Energy will coordinate with each Fire District crossed by Pathway in El Paso County. Copies of the Fire District Coordination Letters are provided in Attachment T.

2.303(22) Monitoring and Mitigation Plan

This section addresses potential impacts from construction and operations of Pathway in El Paso County and also proposed mitigation measures where appropriate. Mitigation measures planned for Pathway are listed by resource in Attachment W, Monitoring and Mitigation Plan. Additional information about the environmental factors considered during the routing and siting study process is provided in Attachment C. Impacts will be minimized during construction of the Project and will be addressed by Xcel Energy. If mitigation attributable to Project impacts is required, it will be addressed during Project construction by Xcel Energy pursuant to permit requirements.

2.303(22)(a) Description of all mitigation that is proposed to avoid, minimize or compensate for adverse impacts of the Project and to maximize positive impacts of the Project.

2.303(22)(a)(i) Describe how and when mitigation will be implemented and financed.

2.303(22)(a)(ii) Describe impacts that are unavoidable that cannot be mitigated.

Mitigation proposed to avoid and minimize adverse impacts of Pathway are listed by resource in Attachment W, Monitoring and Mitigation Plan. Mitigation measures will be implemented as described in Attachment W, Monitoring and Mitigation Plan and as required by the site-specific SWMP and ROW permits. It is anticipated that all impacts can be mitigated.

2.303(22)(b) Description of methodology used to measure impacts of the Project and effectiveness of proposed mitigation measures.

Mitigation measures are listed by resource in Attachment W, Monitoring and Mitigation Plan. Monitoring will be measured as required by the site-specific SWMP and ROW permits.

2.303(22)(c) Description, location and intervals of proposed monitoring to ensure that mitigation will be effective.

Mitigation measures are listed by resource in Attachment W, Monitoring and Mitigation Plan. Effectiveness of mitigation and monitoring efforts will be evaluated as required by the site-specific SWMP and ROW permits.

2.303(23) Additional Information. The Director may request that the applicant supply additional information related to the Project if the Director and/or the Permit Authority will not be able to make a determination on any one of the applicable Review Criteria without the additional information. Such additional information may include applicant's written responses to comments by a referral agency.

Xcel Energy will provide additional information related to Pathway as required by the Planning Director. Following El Paso County's review of the initial 1041 Application submitted in June 2024, Xcel Energy is providing the following additional information in response to El Paso County's review comments:

- Attachment Q: Parcel List
- Attachment R: Studies Evaluating Potential Impacts to Livestock From Electric Transmission Lines
- Attachment S: Colorado Public Utilities Commission Decision Regarding Certificate of Public Convenience and Necessity and Noise and Magnetic Field Reasonableness for Colorado's Power Pathway
- Attachment T: Fire District Coordination Letters
- Attachment U: Results of the Federal Aviation Administration Notice Criteria Tool for Transmission Pole Locations in El Paso County
- Attachment V: Cultural Resource Desktop Review for Colorado's Power Pathway in El Paso County
- Attachment W: Monitoring and Mitigation Plan
- Attachment X: Typical Cross-Section of Proposed Transmission Line Corridor and El Paso County Road Right-of-Way

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