COLORADO'S POWER PATHWAY

EL PASO COUNTY

SITE SELECTION AND CONSTRUCTION OF MAJOR FACILITIES OF A PUBLIC UTILITY

JUNE 2024

Application Submittal Requirements (El Paso County Guidelines and Regulations for Areas and Activities of State Interest Articles 2.303; 2.405; 5.201; 5.202)

Requirement			Location in this Permit Application
2.303 Submission Requirements for All Permit Applications: Waivers			
(1)	Completed application form in the format attached as Exhibit B and approved by the Development Services Director.		Section 2.1 and Attachment A
(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 2.2, Section 1.4, Attachments A through O
(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 2.3
(4)	Information describing the applicant		
	(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 2.4.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 2.4.b
	(c)	Written authorization of the application package by the Project owner, if different than the applicant.	Section 2.4.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 2.4.d
	(e)	Written qualifications of report preparers.	Section 2.4.e, Table 6
(5)	Information Describing the Project		
	(a)	Vicinity map showing the proposed site and the surrounding area	Section 2.5.a, Attachment B
	(b)	Executive summary of the proposal indicating the scope and need for the Project.	Section 1, Section 2.5.b
	(c)	Plans and specifications of the Project in sufficient detail to evaluate the application against the applicable Review Criteria.	Section 1.4, Section 2.5.c, Attachments A through O
	(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 2.5.d, Attachment C
	(e)	Schedules for designing, permitting, constructing and operating the Project, including the estimated life of the Project.	Section 1.1, Table 2, Section 2.5.e

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	(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.	Section 2.5.f
	(g)	Description of relevant conservation techniques to be used in the construction and operation of the Project.	Section 2.22, Table 12, Section 2.5.g, Attachment D, Attachment E, Attachment F, Attachment G, Attachment H, Attachment I, Attachment J, Attachment K, Attachment L
	(h)	Description of demands that this Project expects to meet and basis for projections of that demand.	Section 2.5.h
	(i)	List of adjacent property owners and their mailing addresses.	Section 2.5.i, Attachment M
(6)	Property rights, other permits and approvals.		
	(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 2.6.a
	(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 1.3, Table 3, Section 2.6.b,
	(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 1.3, Section 2.6.c, Table 7
(7)	Land Use.		
	(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 2.7.a, Attachment F
	(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 2.7.b, Attachment F
	(c)	Specify whether and how the proposed Project conforms to the El Paso County Master Plan.	Section 2.7.c, Table 8, Attachment F, Attachment N, Attachment C, Attachment H
	(d)	Specify whether and how the proposed Project conforms to applicable regional and state planning policies.	Section 2.7.d, Section 1.4, Table 3
	(e)	Specify whether and how the proposed Project conforms to applicable federal land management policies.	Section 2.7.e, Section 1.4, Table 3
	(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 2.7.f

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	(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 2.7.g, Attachment G, Attachment O, Attachment H
	(h)	Specify if excess service capabilities created by the proposed Project will prove likely to generate sprawl or strip development.	Section 2.7.h
	(i)	Specify whether the demand for the Project is associated with development within or contiguous to existing service areas.	Section 2.7.i
(8)	The applicant shall supply a surface and subsurface drainage analysis.		Section 2.8, Attachment L
(9)	Financial feasibility of the Project.		
	(a)	Relevant bond issue, loan and other financing approvals or certifications (ex: approved bond issues; bond counsel opinion).	Section 2.9.a
	(b)	Business plan that generally describes the financial feasibility of the Project.	Section 2.9.b
(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 2.10, Attachment I
(11)	Recreational Opportunities. Description of the impacts and net effect of the Project on present and potential recreational opportunities.		Section 2.11
(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 2.12
(13)	Nuisance. Descriptions of noise, glare, dust, fumes, vibration, and odor levels anticipated to be caused by the Project.		Section 2.13, Attachment E
(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 2.14
(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 2.15, Attachment J
(16)	Surface Water Quality.		
	(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 2.16, Section 2.16.a, Table 9, Attachment K, Section 2.19
	(b)	Existing data monitoring sources.	Section 2.16.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 2.16.c
(17)	Groundwater Quality.		Section 2.17, Attachment C
	(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.	

Requirement	Location in this Permit Application
(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. (b) Description of the impacts and net effect of the Project on groundwater.	
(18) Water Quantity.	
(a) Map and/or description of existing stream flows and reservoir levels relevant to the Project.	Section 2.18.a, Attachment K
(b) Map and/or description of existing minimum stream flows held by the Colorado Water Conservation Board.	Section 2.18.b
(c) Descriptions of the impacts and net effect that the Project would have on water quantity.	Section 2.18.c
(d) Statement of methods for efficient utilization of water, including recycling and reuse.	Section 2.18.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 2.18, Section 2.19, Table 9, Attachment K, Table 10, Table 11, Attachment C, Section 2.6.c, Table 7
(20) Soils, Geologic Conditions and Natural Hazards.	
(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 2.20.a, Attachment G
(b) Descriptions of the risks to the Project from natural hazards.	Section 2.20.b, Attachment G, Attachment O, Attachment H
(c) Descriptions of the impacts and net effect of the Project on soil and geologic conditions in the area.	Section 2.20.c
(21) Hazardous Materials.	
(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 2.21.a
(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 2.21.b
(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.	Section 2.22, Table 12, Attachment D, Attachment E, Attachment F, Attachment G, Attachment H, Attachment I, Attachment

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(c) Description, location and intervals of proposed monitoring to ensure that mitigation will be effective.	J, Attachment K, Attachment L
(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 2.23
2.405. Review Criteria for All Applications In addition to the review criteria listed at Sections 3.202, 4.202, 5.202, 6.202, 7.202, 8.202, and 9.202 all applications under these Regulations shall be evaluated against the following general criteria. Following some, but not all of the criteria listed in the above Sections and below are lists of considerations. These considerations are not criteria that the Project must satisfy; they serve solely as guidance. Where such terms as "reasonable," "feasible" and "adequate" are used in the foregoing criteria, the Development Services Director and/or the Permit Authority shall determine in each case what is or is not reasonable, feasible or adequate.	
(1) The health, welfare and safety of the citizens of this County will be protected and served.	Section 3, Section 2.21, Table 13
(2) The proposed activity is in general conformance with the El Paso County Master Plan, Water Quality Management Plan, NPDES Phase II Permit, or other duly adopted plans of El Paso County. The determination of conformance of the Project with these plans may include but is not limited to the following considerations: (a) Likelihood that the Project will/will not cause or contribute to urban sprawl or "leapfrog" development. (b) Significant changes in the amount of impervious surfaces. (c) Contiguity of development associated with the Project to existing growth centers. (d) Changes to unique land forms. (e) Changes in the amount or character of open space. (f) Changes to traffic patterns, road capacity and congestion.	Section 3, Section 2.7.c, Table 13, Attachment I
(3) The Project is financially feasible. The determination of financial feasibility of the Project may include but is not limited to the following considerations: (a) The business plan submitted by the applicant. (b) Relevant bond issue, loan and other financing approval or certifications (ex: approved bond issue; bond counsel opinion).	Section 3, Table 13
(4) The Project is not subject to significant risk from natural hazards. The determination of risk from natural hazards to the Project may include but is not limited to the following considerations: (a) Faults and fissures. (b) Unstable slopes including landslides, rock slides and avalanche areas. (c) Expansive or evaporative soils and risk of subsidence. (d) Wildfire hazard areas. (e) Floodplains.	Section 3, Table 13, Attachment G, Attachment H, Attachment K
(5) The Project will not have a significant adverse effect on the capability of local governments affected by the Project to provide local infrastructure and services, or exceed the capacity of service delivery systems. The determination of the effects of the Project on local government services may include but is not limited to the following considerations: (a) Current and projected capacity of roads, schools, infrastructure, drainage and/or stormwater infrastructure, housing, and other services necessary to accommodate development, and the impact of the Project upon the current and projected capacity.	Section 3, Table 13, Attachment N

Requirement	Location in this Permit Application
(b) Changes caused by the Project in the cost of providing education, transportation networks, water treatment and wastewater treatment, stormwater drainage, channel stabilization, bridges, emergency services, or other governmental services or facilities. (c) Need for temporary roads to access the Project for construction and maintenance. (d) Change in demand for public transportation.	
(6) The Project will not have a significant adverse effect on the quality or quantity of recreational opportunities and experience. The determination of effects of the Project on recreational opportunities and experience may include but is not limited to the following considerations: (a) Changes to existing and projected visitor days. (b) Changes in quality and quantity of fisheries. (c) Changes in instream flows or reservoir levels. (d) Changes in access to recreational resources. (e) Changes to quality and quantity of hiking, biking, or horseback riding trails. (f) Changes to hunting experiences. (g) Changes to open space. (h) Changes to existing conservation easements. (i) Changes to regional or neighborhood parks.	Section 3, Table 13, Attachment F
(7) The Project will not significantly degrade air quality. The determination of effects of the Project on air quality may include but is not limited to the following considerations: (a) Changes in visibility and microclimates. (b) Applicable air quality standards.	Section 3, Table 13
(8) The Project will not significantly degrade existing visual quality. The determination of visual effects of the Project may include but is not limited to the following considerations: (a) Visual changes to ground cover and vegetation, waterfalls and streams, or other natural features. (b) Interference with viewsheds and scenic vistas. (c) Changes in landscape character types of unique land formations. (d) Compatibility of structure size and color with scenic vistas and view sheds. (e) Changes to open space. (f) Changes to existing conservation easements. (g) Changes to impacts to regional or neighborhood parks.	Section 3, Table 13, Attachment N, Attachment J
(9) The project will not significantly degrade surface water quality. The determination of effects of the Project on surface water quality may include but is not limited to the following considerations: (a) Changes to existing water quality, including patterns of water circulation, temperature, conditions of the substrate, extent and persistence of suspended particulates and clarity, odor, color or taste of water. (b) Applicable narrative and numeric water quality standards. (c) Changes in point and nonpoint source pollution loads. (d) Increase in erosion. (e) Changes in sediment loading to waterbodies. (f) Changes in stream channel or shoreline stability. (g) Changes in stormwater runoff flows. (h) Changes in trophic status or in eutrophication rates in lakes and reservoirs. (i) Changes in the capacity or functioning of streams, lakes or reservoirs.	Section 3, Table 13, Attachment L

Requirement	Location in this Permit Application
(j) Changes to the topography, natural drainage patterns, soil morphology and productivity, soil erosion potential, and floodplains. (k) Changes to stream sedimentation, geomorphology, and channel stability. (l) Changes to lake and reservoir bank stability and sedimentation, and safety of existing reservoirs.	
(10) The Project will not significantly degrade groundwater quality. The determination of effects of the Project on groundwater quality may include but is not limited to the following considerations: (a) Changes in aquifer recharge rates, groundwater levels and aquifer capacity including seepage losses through aquifer boundaries and at aquifer-stream interfaces. (b) Changes in capacity and function of wells within the impact area. (c) Changes in quality of well water within the impact area.	Section 3, Table 13, Attachment L
(11) The Project will not significantly degrade wetlands and riparian areas, terrestrial or aquatic plant or animal life. The determination of effects of the Project on these areas shall include the considerations raised in the applicable federal and/or state Permits.	Section 3, Table 13, Attachment C, Attachment K
(12) The Project will not significantly deteriorate soils and geologic conditions. The determination of effects of the Project on soils and geologic conditions may include but is not limited to the following considerations: (a) Loss of topsoil due to wind or water forces (b) Changes in soil erodibility (c) Physical or chemical soil deterioration (d) Terrain deformation/mass wasting/subsidence (e) Compacting, sealing and crusting (f) Waterlogging (g) Soil morphology and productivity	Section 3, Table 13, Attachment G
(13) The Project will not cause a nuisance. The determination of nuisance effects of the Project may include but is not limited to the following considerations: increase in odors, dust, fumes, glare, heat, noise, vibration or artificial light.	Section 3, Table 13, Attachment E
(14) The Project will not result in unreasonable risk of releases of hazardous materials. The determination of the risk of release of hazardous materials caused by Project may include but is not limited to the following considerations: (a) Plans for compliance with federal and state handling, storage, disposal, and transportation requirements. (b) Use of waste minimization techniques. (c) Adequacy of spill prevention and response plans.	Section 3, Table 13
(15) Urban development, population densities, and site layout and design of storm water and sanitation systems shall be accomplished in a manner that will prevent the pollution of aquifer recharge areas. The determination of potential for pollution of the aquifer recharge areas by the Project may include but is not limited to the following considerations: (a) Proximity of urban development and population densities to aquifer recharge areas. (b) Proximity of stormwater and sanitation systems to aquifer recharge areas. (c) Changes in water quality in the aquifer recharge areas.	Section 3, Table 13
(16) The Project shall be reasonably necessary to meet projected community development and population demands in the areas to be served by the Project, or to comply with regulatory or technological requirements. The determination of whether the Project is reasonably necessary may include but is not limited to the following considerations: (a) Relationship to reasonable growth projections and local land use plans. (b) Relationship to other providers' service areas. (c) Whether the Project is not in compliance with regulatory or technological requirements or will not be in compliance in the near future.	Section 3, Table 13

Requirement			Location in this Permit Application
5.201 Application Submittal Requirements In addition to the materials listed at Section 2.303, all applications to locate or construct a major facility of a public utility shall be accompanied by the following information, in the number required by the Director:			
(1)	Vicinity map showing the proposed site and the surrounding area. The Project area to be shown shall be defined as follows:		Section 4.1, Attachment B
	(a)	If a power plant is proposed, the area within fifty (50) miles radius from the site;	Not applicable
	(b)	If new transmission lines or pipelines are proposed, provide a map showing all existing transmission lines and pipelines for a distance of two miles radius beyond any reasonable alternative studied.	Section 4.1, Attachment B, Attachment N
	(c)	For upgrades of existing transmission lines or gas pipelines, a map showing all existing transmission lines and pipelines within one (1) mile on either side of the proposed alignment.	Not applicable
	(d)	For all other major facilities of a public utility, the area within ten (10) miles radius of the site if another major facility is proposed.	Not applicable
(2)	Type of facility - specify where applicable:		
	(a)	The voltages and lengths of transmission lines.	Section 4.2.a, Section 1.4.a, Table 4
	(b)	Type of poles used, with graphic depictions.	Section 4.2.b, Section 1.4.a, Attachment J
	(c)	Power source and generating capacity.	Section 4.2.c
	(d)	The functions and sizes of substations.	Section 4.2.d
	(e)	The diameters and lengths of pipelines.	Section 4.2.e
	(f)	The capacities of the storage tanks and types of petroleum derivative to be stored.	Section 4.2.f
	(g)	Corridor locations and dimensions.	Section 4.2.g, Attachment B
	(h)	Service area.	Section 4.2.h
(3)	Resource area (e.g., source of power being generated or transmitted, source of petroleum derivative being transported).		Section 4.3
(4)	Projected development schedule.		
	(a)	Specify timetable for planning (e.g., federal permits, other State permits, local zoning, etc.).	Section 4.4.a, Section 1.3, Table 3
	(b)	Estimate beginning and completion of construction and beginning of operation of facility.	Section 4.4.b, Section 1.1, Table 2
(5)	Hazards and emergency procedures:		
	(a)	Describe hazards, if any, of fire, explosion and other dangers to the health, safety and welfare of employees and the general public.	Section 4.5.a
	(b)	Describe hazards, if any, of environmental damage and contamination due to solid waste, hazardous waste, petroleum products, hazardous, toxic, and explosive substances or materials used at, or activities taking place at, the proposed facility.	Section 4.5.b
	(c)	Describe emergency procedures to be used in the event of fire, explosion or other event which may endanger the public health, safety and welfare.	Section 4.5.c, Attachment H
(6)	The applicant shall supply an analysis of non-structural alternatives to the Project, such as conservation of energy use, no development or management (different scheduling, conservation programs, facility design, land trades etc.), if applicable.		Section 4.6

Requirement	Location in this Permit Application
(7) The applicant shall supply an analysis of structural alternatives to the Project, such as alternate locations and routes, alternative types of facilities, use of existing rights-of-way, and joint use of rights-of-way with other utilities and upgrading of existing facilities.	Section 4.7, Attachment C
(8) Detailed description of the need for the proposed development or activity, including but not limited to:	
(a) The present population of the area to be served and the total population to be served when the project is operating at full capacity.	Section 4.8.a
(b) The predominant type of users or communities to be served by the proposal.	Section 4.8.b
(c) The percentage of the design capacity at which the current system is now operating.	Section 4.8.c, Section 4.8.e
(d) If the proposal is for construction of a new facility and the capacity of that facility exceeds a ten-year projected increase in demand, a detailed explanation of the excess service capacity and the cost of the excess capacity.	Section 4.8.d
(e) The relationship of the proposal to the applicant's long-range planning and capital improvement programs.	Section 4.8.e
(f) A description of the user needs and user patterns to be fulfilled by the proposed Project.	Section 4.8.f, Section 4.8.d
(g) A description of the relationship of the Project to other existing and planned utility facilities of a similar nature, other communication or energy generation and transmission facilities, local government capital improvement programs and special district expansion programs.	Section 4.8.g, Section 1
(9) Environmental impact analysis.	
(a) Land use:	Section 4.9.a.1, Section 2.7, Attachment F, Attachment N
(i) Specify how the proposed development will utilize existing easements or rights-of-way for any associated distribution or collector networks.	Section 4.9.a.1, Section 2.7, Attachment N
(b) Information regarding other utility facilities:	
(i) A map showing each existing major facility of a public utility within the County of the type proposed for development.	Section 4.9.b.1, Attachment N
(ii) The design capacity of each such facility, the excess capacity of each such facility and the percentage of capacity at which each such facility operates.	Section 4.9.b.2, Section 4.8.e
(iii) Whether present facilities can be upgraded to adequately accommodate a ten-year projected increase in demand for services to be offered by the proposed project.	Section 4.9.b.3, Section 4.8.e
(10) Applicants seeking a permit for the site selection and construction of a power plant shall submit, in addition to those requirements set forth above, a map locating and describing resource areas to be utilized as sources of energy.	Not applicable
(11) Applicants seeking a permit for the site selection and construction of transmission lines or substations shall submit the following additional documents and information:	
(a) Computer modeled electromagnetic field measurement within the proposed transmission line easement for that portion of the transmission line between substations or transition sites; and	Section 4.11.a, Attachment E
(b) Measures taken to comply with the concept of prudent avoidance with respect to planning, siting, construction and operation of transmission lines, which may be those steps taken to comply with CCR 723-3 Section 3206{9){b) or similar authority, for projects where other similar authority is applicable.	Section 4.11.b, Attachment C
5.202. Review Criteria A permit to conduct site selection and construction of a major facility of a public utility shall be approved if the Permit Authority, or in the case of an Administratively Approved Permit, the Director finds the application complies with the following criteria and the	

Requirement	Location in this Permit Application
relevant criteria at Section 2.405. If the Permit Authority finds the application does not comply, the application shall be denied or may be approved with conditions.	
(1) All reasonable alternatives to the proposed action, including use of existing rights-of-way and joint use of rights-of-way wherever uses are compatible, have been adequately assessed and the proposed action represents the best interests of the people of this County and presents the best utilization of resources in the impact area.	Section 5, Table 14, Attachment C
(2) A satisfactory program to mitigate and minimize adverse impacts has been presented.	Section 5, Table 14, Section 4, Section 2.22, Table 13, Attachment D, Attachment E, Attachment F, Attachment G, Attachment H, Attachment I, Attachment J, Attachment K, Attachment L
(3) Reserved.	Section 5, Table 14,
(4) Electric transmission lines and pipelines shall be located so as to discourage traffic congestion, incompatible uses, and expansion of the demand for government services beyond the reasonable capacity of the community or region, and to avoid unreasonable or burdensome expenditure of public resources.	Section 5, Table 14, Attachment I
(5) Major facilities of a public utility shall be administered so as to minimize disruption of the service provided by the utility and preserve desirable existing community patterns.	Section 5, Table 14

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TABLES

FIGURES

ATTACHMENTS

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
CFR	Code of Federal Regulations
Compass	Colorado Cultural Resource Online Database
CPCN	Certificate of Public Convenience and Necessity
CPUC	Colorado Public Utilities Commission
CRS	Colorado Revised Statutes
dBA	A-weighted decibels
EMF	Electric and Magnetic Fields
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
IEEE	Institute of Electrical and Electronics Engineers
IPaC	USFWS Information for Planning and Consultation
kV	Kilovolt
LEPC	Lesser Prairie-Chicken
mG	Milligauss
NESC	National Electrical Safety Code
NHD	National Hydrography Dataset
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 conducting business as Xcel Energy

1 INTRODUCTION

Public Service Company of Colorado, a Colorado corporation conducting business as Xcel Energy (Xcel Energy), proposes to construct, maintain, and operate Colorado's Power Pathway (Pathway) in eastern Colorado. Xcel Energy is submitting this 1041 permit application (Application) for a permit to locate and construct major facilities of a public utility (1041 permit) pursuant to 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; El Paso County 2023). The Application addresses each section in the El Paso County §1041 Regulations, as noted in the headings and tables throughout the Application.

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. Pathway includes:

- Installation of approximately 550 miles of new 345-kilovolt (kV) double-circuit transmission line in 12 counties;
- Construction of four new electric substations (Canal Crossing, Goose Creek, May Valley and Sandstone); and
- Expansion, equipment additions, or equipment upgrades at four existing electric substations (Fort St. Vrain, Pawnee, Harvest Mile, and Tundra).

Pathway will be constructed in five segments (Figure 1). The Colorado Public Utilities Commission (CPUC) did not approve construction of the May Valley – Longhorn Extension (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.

Each new or expanded electric substation will serve as an endpoint for the transmission line segments:

- Fort St. Vrain – Canal Crossing (Segment 1)
- Canal Crossing – Goose Creek (Segment 2)
- Goose Creek – May Valley (Segment 3)
- May Valley – Sandstone – Tundra (Segment 4)

- Sandstone – Harvest Mile (Segment 5)

The estimated length of each transmission line segment and location of each substation is outlined in Table 1.

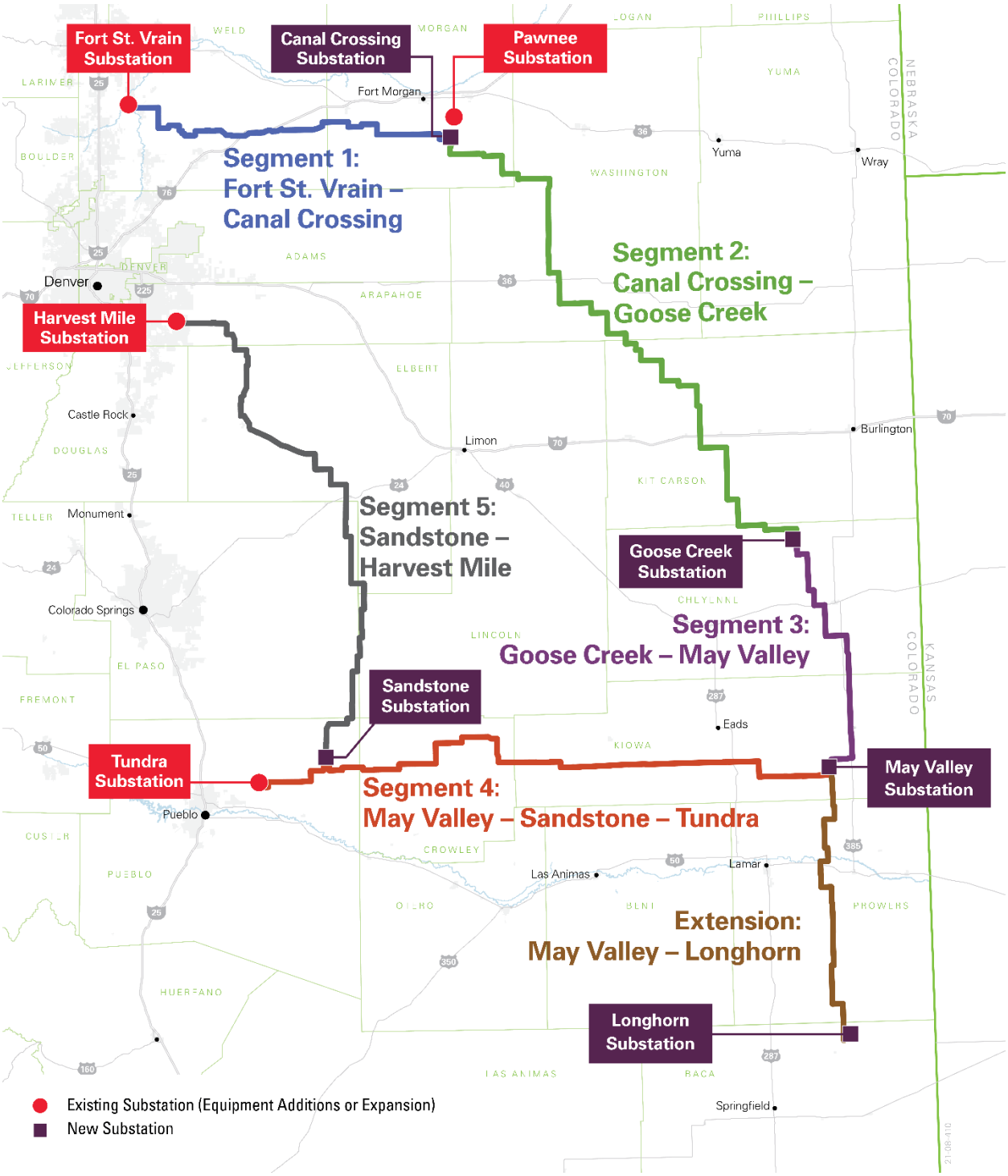

Figure 1: Colorado's Power Pathway

Table 1: Colorado's Power Pathway by County

County	Segment (Estimated Miles of Transmission)							Substation
	1	2	3	4	5*	Ext. **	Total	
Baca	-	-	-	-	-	2	2	New Longhorn
Cheyenne	-	9	35	-	-	-	44	New Goose Creek
Crowley	-	-	-	41	-	-	41	-
Kiowa	-	-	22	64	-	6	92	New May Valley
Kit Carson	-	62	-	-	-	-	62	-
Lincoln	-	-	-	-	4	-	4	-
Morgan	27	21	-	-	-	-	48	New Canal Crossing, Pawnee Equipment Additions
Prowers	-	-	-	-	-	51	51	-
Washington	-	53	-	-	-	-	53	-
Weld	47	-	-	-	-	-	47	Fort St. Vrain Equipment Additions
El Paso	-	-	-	-	45	-	45	-
Elbert	-	-	-	-	50	-	50	-
Arapahoe*	-	-	-	-	18	-	18	Harvest Mile Equipment Additions
Pueblo	-	-	-	25	9	-	34	Tundra Expansion, New Sandstone
Total	74	145	57	130	126	59	591	

*The mileage for Pathway facilities in Aurora (1 mile) is included in Arapahoe County total.

** The CPUC did not approve construction of the Extension Segment 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.

Pathway facilities proposed in El Paso County include approximately 45 miles of new 345-kV double-circuit electric transmission line. Proposed activities in El Paso County will also include seeking approval of all temporary construction areas (TCA) associated with construction of the Pathway facilities for the duration needed to complete Pathway construction. Pathway will be constructed in segments, with a portion of Segment 5 proposed to be located in El Paso County.

The following addresses the information that applies to Pathway from Sections 2.303, 2.405, 5.201, and 5.202 of the El Paso County §1041 Regulations. Note that Pathway is a backbone transmission system that serves Colorado; as such, this Application does not address project-specific details that apply for developments or direct utility service projects.

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 support Xcel Energy's Clean Energy Plan (Xcel Energy 2021) that is estimated to deliver as much as an 85 percent reduction in carbon dioxide emissions by 2030 and add approximately 6,500 megawatts of new wind, solar, and other resources. Pathway will help to meet the state's growing electricity needs, improve safety, reliability, and affordability, and enable the transition to clean energy. 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.

In March 2021, Xcel Energy filed a Certificate of Public Convenience and Necessity (CPCN) application with the CPUC describing the purpose, need, and public benefits of constructing Pathway. In February 2022, the CPUC provided verbal approval, and in June 2022, CPUC provided written approval of the CPCN for Segments 1 through 5 based on a determination that Pathway is in the public interest. 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 determined through easement negotiations with landowners and the land use approval process in the applicable jurisdictions where the Pathway facilities will be located.

1.1 ESTIMATED PATHWAY SCHEDULE

The estimated approval, construction, and in-service schedule for Pathway facilities is shown in Figure 2. Many variables factor into the schedule for projects of this magnitude. The construction schedule is contingent on acquiring all necessary land rights and permits.

Pathway will be constructed and brought in-service in phases. The estimated construction timeline for each segment and related substation, and anticipated in-service dates are shown in Figure 2 and Table 2.

Transmission line Segment 5 and associated new substations and substation expansions or equipment additions will be completed in 2027, provided required approvals are obtained.

Table 2: Estimated Individual Segment and Substation Construction and In-Service Dates

Segment & Substation	Construction	In-Service Year
Segment 1 & Fort St. Vrain Substation Equipment Additions	Spring 2024–Spring 2026	Spring 2026
Segment 2 & New Canal Crossing & Goose Creek substations & Pawnee Substation Equipment Additions	Spring 2023–Spring 2025	Spring 2025
Segment 3 & New May Valley Substation	Spring 2023–Spring 2025	Spring 2025
Segment 4, Tundra Substation Expansion & New Sandstone Substation	Spring 2025–Spring 2027	Spring 2027
Segment 5, Harvest Mile Substation Equipment Additions	Spring 2025–Spring 2027	Spring 2027

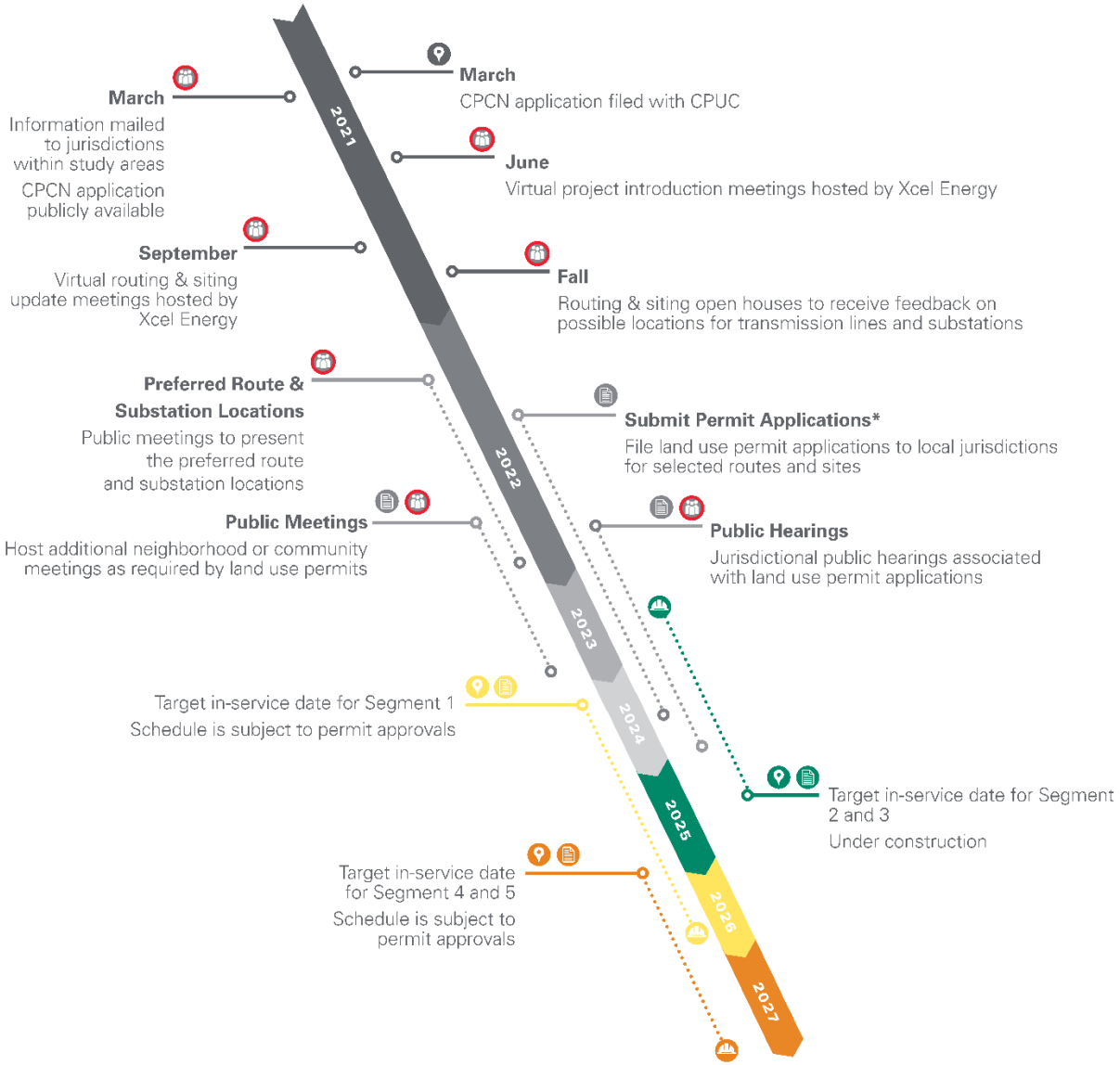

Figure 2: Estimated Pathway Schedule

1.2 PATHWAY ACTIVITIES PRIOR TO SUBMITTAL OF APPLICATION

1.2.a Public Outreach

Public outreach efforts were conducted to receive public and stakeholder feedback and input on transmission line route and substation site selection (see Transmission Line Routing & Substation Siting Studies section).

- In June 2021, three virtual introductory meetings were held for the public to discuss Pathway's benefits to communities and the process to be used to identify the locations of the proposed transmission lines and new substations. These meetings were held virtually due to restrictions on large gatherings due to COVID-19.
- In June through September 2021, Pathway representatives met with jurisdictions within Pathway's Study Areas to discuss Pathway and receive feedback. Pathway representatives met with El Paso County representatives on June 23, 2021.
- In September 2021, two virtual routing and siting meetings were held for the public to learn about the progress made on Pathway, including the development of focus areas for identification of transmission line links and substation sites. These meetings were held virtually due to restrictions on large gatherings due to COVID-19.
- In October and November 2021, 15 in-person public open houses were held to gather public feedback on the preliminary transmission links. Two public open houses were held in Calhan and Ellicott on November 8 and 9, 2021.
- In January through March 2022, 15 in-person open houses were held to present the preferred route for Segments 1, 2, 3, 4, and the Extension and to present additional preliminary transmission links for Segment 5. A public open house was held in Yoder on March 3, 2022.
- In May 2022, four in-person open houses were held to gather additional public feedback on the preliminary transmission links and preferred route for Segment 5.
- In August 2022, two in-person open houses were held in the Eastern Review Area, an area further east from the Segment 5 preliminary transmission links and partial preferred route, to gather feedback from landowners in that area about potential additional route options.

1.2.b Transmission Line Routing & Substation Siting Studies

Routing a new transmission line and siting a substation require a comprehensive review and analysis of factors and criteria including, but not limited to, electric system planning, engineering, environmental and cultural resources, land use, regulatory requirements, land rights, stakeholder input, and public and worker safety. As shown in Figure 3, the five-step routing and siting process assesses constraints and opportunities between segment endpoints to ultimately identify the preferred route location for the transmission line and the preferred locations for new substation sites. The process is described in detail in the routing and siting studies for each segment of Pathway. The Routing and Siting Study for Segment 5 is attached to this Application as Attachment C. The other routing and siting studies are not provided because they do not involve transmission lines or substations within El Paso County.

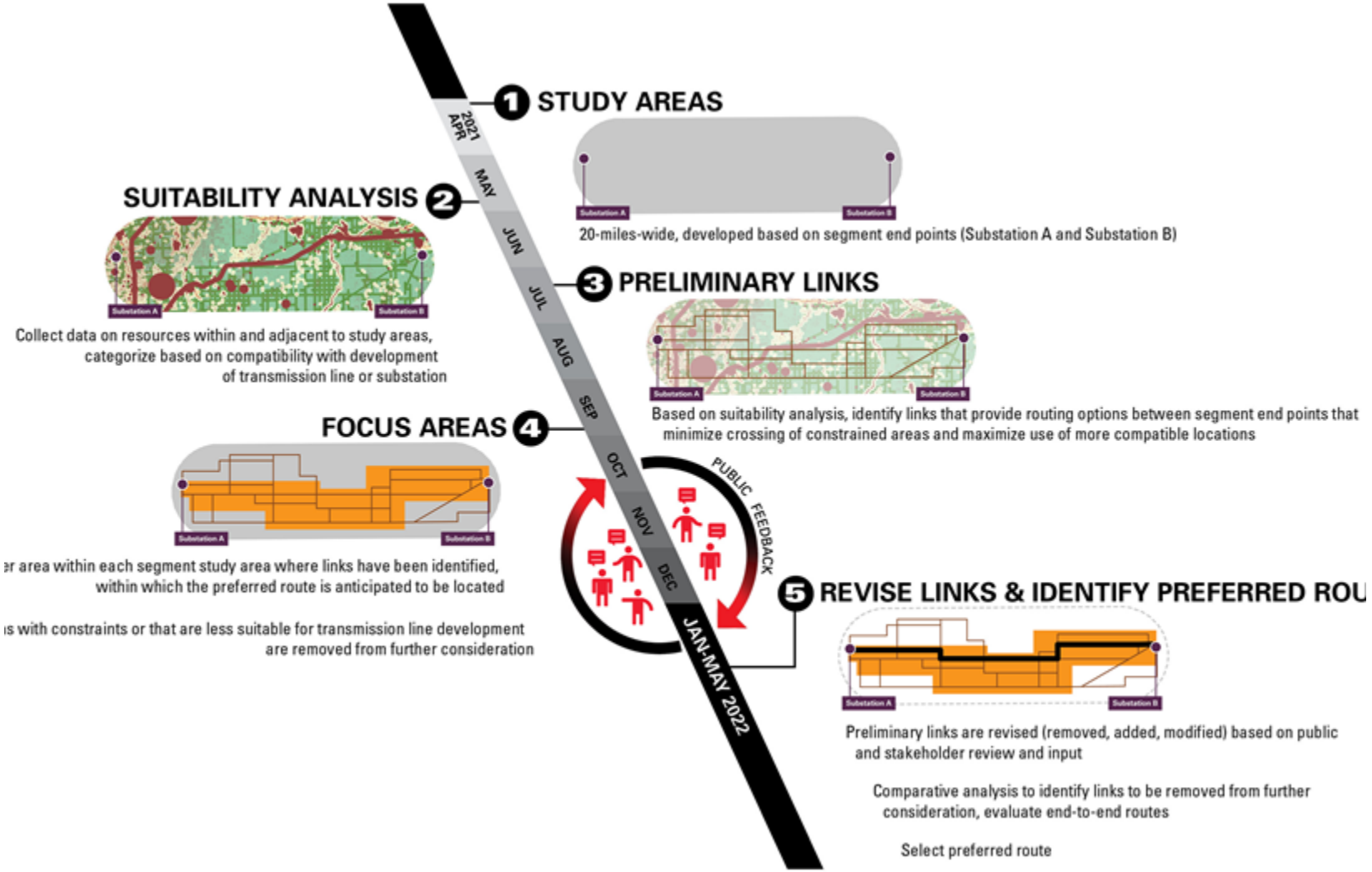

Figure 3: Pathway Routing and Siting Study Process

1.3 REGULATORY FRAMEWORK

Federal, state, and local permits and approvals may be required prior to Pathway construction. Outreach was conducted with each jurisdiction crossed by Pathway to solicit feedback and discuss potential permits that may be required.

Multiple Colorado statutory provisions and local government land use plans and controls apply to Pathway, including approval of a CPCN from the CPUC; notice, consultation, and permit approvals from counties and municipalities, and notice to owners of a mineral estate associated with the substation sites.

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 may include but are not limited to major land use permits, right-of-way (ROW) permits, road use agreements, access permits, oversize/overweight permits, grading permits, and stormwater permits.

Xcel Energy anticipates avoiding impacts to jurisdictional waters of the U.S. (WOTUS) in El Paso County and therefore does not anticipate that Pathway facilities in the county will require a Nationwide Permit 57 or other U.S. Army Corps of Engineers permitting under the Federal Clean Water Act, Section 404.

The regulatory requirements identified by Xcel Energy are described in Table 3. Table 3 is intended as an illustrative list of the permits and approvals that may be required for Pathway, but other permits or approvals may be required.

Table 3: Land Use Permit Requirements and Applicability to Pathway

Jurisdiction	Pathway Components	Title	Trigger	Statutory Reference	Status
Federal Aviation Administration (FAA)	Structures occurring in Navigable Airspace	FAA Form 7460-1, Notice of Proposed Construction or Alteration	Objects affecting navigable airspace	Title 14 Code of Federal Regulations (CFR) Part 77	To be submitted following final design
CPUC	All	CPCN	Need for new electrical facility in Colorado	Colorado Revised Statutes (CRS) 40-5-101, CRS et seq., and Rule 1303 4 Code of Colorado Regulations (CCR) 723-1 and Rules 3002, 3102, and 3206, 4 CCR 723-3	Proceeding No. 21A-0096E, Approved June 2, 2022
	All	Notification of Intention to Submit Permit Application for Major Electrical Facilities	Filing permit application for location, construction, or improvement of major electrical or natural gas facilities	CRS 29-20-108	In addition to other notifications, Xcel Energy met with El Paso County on June 23, 2021; February 8, 2022; and August 24, 2023, about Pathway.
	All	Government and State Notice Requirements, Mineral Owners	Public hearing by a local government on an application for development	CRS 24-65.5-103	Pursuant to the statute CRS 24-65.5-103, the Pathway transmission line is exempt from the statutory mineral estate owner mailing notification requirements.

Jurisdiction	Pathway Components	Title	Trigger	Statutory Reference	Status
Colorado Department of Public Health and Environment (CDPHE)	All	Construction General Stormwater Permit and Stormwater Management Plan (SWMP)	Construction sites that disturb one acre or greater	5 CCR 1002-61	To be obtained prior to construction
	All	Land Development Air Pollution Emissions Notice (APEN)	Construction disturbance greater than 25 contiguous acres and land development activities longer than 6 months	5 CCR 1001-14	To be obtained prior to construction
Colorado Department of Transportation	Components crossing state and federal roadways	Access and Crossing Permits	Crossings of state roadway	2 CCR 601-1	To be obtained prior to construction
Colorado State Historic Preservation Office	To be determined following final design and pre-construction surveys	Determination of Compliance with Historical, Prehistorical, and Archaeological Resources	Potential impacts to historic, prehistoric and/or archaeological resource	CRS 24-80-401-411, CRS 24-80-1301-1305, 8 CCR 1504-7	Pathway will coordinate with the State Historic Preservation Office on any applicable requirements for cultural resources review.
Burlington Northern Santa Fe Railroad	Components crossing railroads	Access and Crossing Permits	Crossings of railroad	49 CFR 200.1 et. Seq., CRS 32-12-123, CRS 37-95-108	To be obtained prior to construction.

Jurisdiction	Pathway Components	Title	Trigger	Statutory Reference	Status
Concurrent County Land Use Permits					
Arapahoe County	Segment 5; Harvest Mile Substation Equipment Additions	1041 Permit and Location and Extent Permit	Proposed development of an activity of state interest (major facility of a public utility) in Arapahoe County	Regulations Governing Areas and Activities of State Interest in Arapahoe County	Anticipated submittal in second quarter of 2024
Crowley County	Segment 4	Use by Special Review	Development of public utility and public service structures, including transmission lines in Crowley County	Crowley County Planning and Zoning Manual, Section 2	Use by Special Review Permit approved in Resolution Number 2023-8591 on April 24, 2023.
Elbert County	Segment 5	1041 Permit, Use by Special Review	Proposed development of an activity of state interest (major facility of a public utility) in Elbert County	Guidelines and Regulations for Areas and Activities of State Interest Elbert County	Anticipated submittal in second quarter of 2024
Pueblo County	Segment 4, 5; Tundra Substation equipment additions, and new Sandstone Substation	1041 Permit	Proposed development of an activity of state interest (major facility of a public utility) in Pueblo County	Pueblo County Code, Title 17, Division 2: Areas and Activities of State and Local Interest	Anticipated submittal in second quarter of 2024

Jurisdiction	Pathway Components	Title	Trigger	Statutory Reference	Status
Weld County	Segment 1; Fort St. Vrain Expansion	1041 Permit, Use by Special Review, Site Development Plan	Proposed development of an activity of state interest (major facility of a public utility) and change to an existing approved Use by Special Review permit in Weld County	Weld County Charter and County Code Chapter 21 Areas and Activities of State Interest; Weld County Charter and County Code Article 2, Division 5 Special Review Permits for Major Facilities of a Public Utility or Public Agency; Weld County Charter and County Code Article 2, Division 3 Site Plan Review and Minor Amendment to a Use by Special Review Procedural Guide	1041 permit issued on April 3, 2024. Use by Special Review permit issued on February 20, 2024. Site Plan Review conditionally approved on November 14, 2023.
City of Aurora	Segment 5	Conditional Use Permit and Site Plan	Proposed development of a conditional use in City of Aurora	Aurora Unified Development Ordinance, Article 146 Zoning and Subdivision Procedures, Section 5 Specific Procedures	Submitted April 2024
Lincoln County	Segment 5	Use by Special Review	Proposed new land use or development	Lincoln County Zoning Resolution, Article 3 Use by Special Review Procedures	Anticipated submittal in second quarter of 2024

Jurisdiction	Pathway Components	Title	Trigger	Statutory Reference	Status
County and City Land Use Permits Filed in Summer 2022					
Morgan County	Segment 1, 2; Canal Creek Substation, equipment additions at Pawnee Substation	1041 Permit	Proposed development of an activity of state interest (major facility of a public utility) in Morgan County	Guidelines and Regulations for Areas and Activities of State Interest	1041 Permit issued on November 16, 2022.
Kit Carson County	Segment 2	Land Use Change Permit	Any proposed change in land use in unincorporated Kit Carson County	Kit Carson County Code, Article 2	Land Use Change Permit issued on September 21, 2022
Washington County	Segment 2	Use by Special Review and 1041 Permit	Proposed development of transmission line in Washington County	Application for Use by Special Review, Washington County	Use by Special Review Permit was issued on November 21, 2022; 1041 Permit was issued on December 13, 2022.
Cheyenne County	Segment 2, 3; Goose Creek Substation	Conditional Use Permit and 1041 Permit	Proposed development of a conditional use in Cheyenne County	Cheyenne County Comprehensive Plan and Zoning Ordinance	Conditional Use Permit was issued on September 30, 2022. 1041 Permit was issued on September 30, 2022.

Jurisdiction	Pathway Components	Title	Trigger	Statutory Reference	Status
Kiowa County	Segments 3, 4; New May Valley Substation	1041 Permit	Proposed development of an activity of state interest (major facility of a public utility) in Kiowa County	Guidelines and Regulations for Areas and Activities of State Interest County of Kiowa	1041 Permit was issued on November 22, 2022.
Other County and City Land Use Permits Considered					
Town of Platteville	Segment 1	Not applicable	Town confirmed that the only permit approval required was from the Colorado Department of Transportation (CDOT)	Platteville Municipal Code, Chapters 15-18	Not applicable

1.4 DESCRIPTION OF FACILITY

This Application addresses only the portion of the Pathway transmission line and all TCAs for staging and laydown yards, conductor stringing areas, and concrete batch plants associated with construction of the Pathway facilities for the duration needed to complete Pathway construction subject to the Application located within El Paso County (see Attachment B, Vicinity Map). Pathway land use permitting is occurring concurrently with Weld, Elbert, Arapahoe, Lincoln, and Pueblo counties and the City of Aurora for the portions of Segments 4 and 5 that occur in those jurisdictions. Coordination is ongoing with additional jurisdictions for other Segments.

This Application package was prepared per the requirements of the El Paso County §1041 Regulations. The Application also was prepared based on direction provided by El Paso County representatives during the Early Assistance Meeting held on August 24, 2023.

Pathway facilities proposed in El Paso County subject to this Application include 45 miles of 345-kV double-circuit transmission line in Segment 5 (Attachment B). The proposed transmission line route in El Paso County is generally oriented in a north to south direction in the area south of Simla, near the El Paso/Lincoln county line.

The following sections describe the Pathway transmission line facilities within El Paso County subject to this Application.

1.4.a Transmission Line

The new 345-kV double circuit transmission line will be constructed using steel poles. A single pole will be used for most transmission pole locations; however, two transmission poles will be required in certain locations where the weight of the conductor requires extra structural support. These are typically 'angle locations' where the line changes direction. Each transmission pole will be placed on a concrete foundation. Voltage, conductor sag, pole type, terrain, length of span between transmission poles, and minimum clearances of existing buildings influence the necessary height of transmission pole. The transmission poles will be weathering steel and a brown or rust color. The anticipated physical characteristics of a double-circuit pole are summarized in Table 4, and a representative transmission pole with line is shown in Figure 4.

Table 4: Typical 345-kV Double Circuit Transmission Line Characteristics

Characteristic	Anticipated Design
Typical height	105-140 feet (poles will not exceed 199-foot maximum height)
Right-of-way	150 feet total width, 75 feet on either side of the transmission line corridor centerline
Span length	Typically 950 feet between transmission poles
Material/color	Weathering steel, brown or rust color
Clearance	Maintain all clearances as required by National Electrical Safety Code

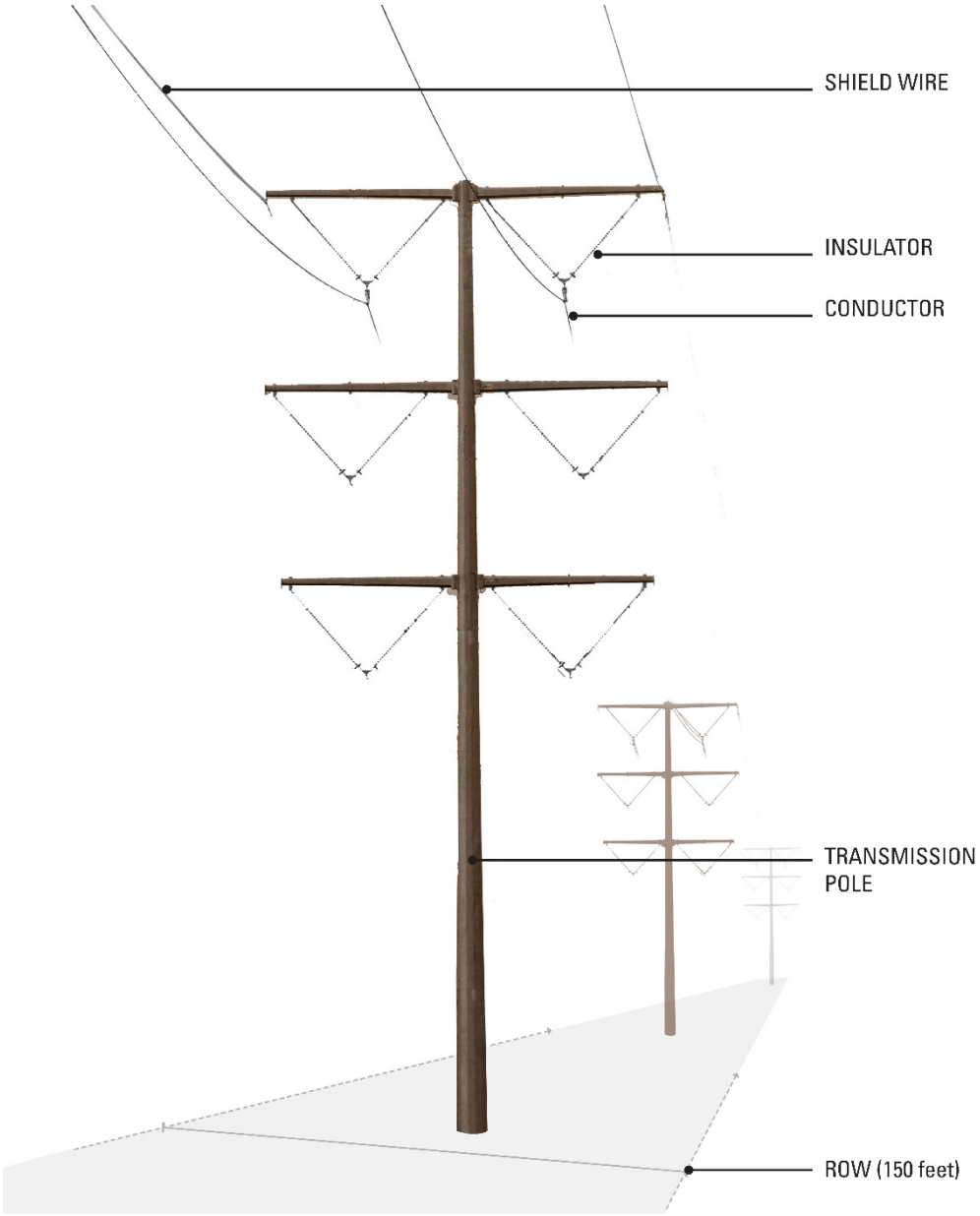

Figure 4: Typical Transmission Pole Configuration (Illustrative)

1.4.b Transmission Line Access

Construction access roads will allow construction crews and vehicles to access transmission pole locations and temporary construction areas (TCAs; described below). Traffic controls may be required near TCAs during construction to ensure the safety of crews and the travelling public.

Where practicable, existing public roads and private roads will be utilized during Pathway construction, maintenance, and operation. Some private roads may require improvements and some new access roads will need to be constructed to accommodate construction equipment and long-term maintenance of the transmission line.

Where road improvements are needed, Xcel Energy will acquire any necessary grading, stormwater, and erosion control permits and comply with permit requirements. Xcel Energy will acquire permanent or temporary access easements where necessary access routes traverse private property. Some access routes may remain post-construction to maintain access to transmission lines for operation and maintenance activities.

1.4.c Temporary Construction Areas

TCAs will be used during construction to stage construction equipment and materials including construction trailers, cranes, and transmission poles. Some TCAs may require grading to level out the area for equipment placement and materials storage. TCAs are also necessary when stringing the conductor wire. This Application seeks approval of the TCAs required for Pathway construction for the duration necessary to complete Pathway construction. At the end of each construction phase, all equipment will be removed from the TCAs solely used for that construction phase. No proposed improvements at the TCAs will be permanent, and remaining areas will be restored in a manner generally similar to preconstruction conditions.

Final TCA locations will be identified once construction plans are finalized. Additional details about TCAs are discussed in the following sections. The TCAs will be an approved accessory use for the Pathway transmission line in El Paso County under this Application including use of the TCAs as a concrete batch plant. Final TCA locations identified by Xcel Energy may be reviewed and administratively approved by County staff for a duration sufficient to allow completion of permitted construction.

1.4.c.1 Staging/Laydown Areas

Staging and laydown areas will be located within the TCAs and will be used for equipment delivery, storage, and assembly. Additional TCAs used for transmission pole laydown and staging may be required for construction.

1.4.c.2 Helicopter Fly Yards

Transmission poles may be installed using either cranes or a helicopter. Some TCAs also may be used as helicopter fly yards in those areas where helicopter assistance is required for transmission pole installation. Transmission poles may be assembled in the fly yards and transported by helicopter to the location where each pole will be installed.

1.4.c.3 Conductor Stringing Areas

TCAs will be used for stringing the conductor wire. The locations and use of TCAs for this function are required at specific angles to ensure the conductor wire is pulled in line with the transmission poles, thereby limiting the strain on the poles. In addition, temporary TCAs may be used adjacent to public ROW for temporary guarding/protecting of the roadway during stringing of the new transmission line. These temporary guard sites will be restored following construction, as described above.

1.4.d Areas for Other Construction Activities

Construction contractors also will use TCAs to store water trucks, traffic control items, and best management practice (BMP) materials for stormwater management and erosion control. Water will be used in concrete production, dust suppression, and compaction activities. Traffic control will be implemented where required for the safety of the construction crews and the traveling public. BMPs will be installed to meet stormwater, grading, and erosion control requirements. Construction contractors will work with the appropriate jurisdictions to obtain and follow all related construction permits.

1.4.e Construction Process

1.4.e.1 Construction Phases

Construction of the transmission line is expected to occur in phases that generally include the following: construction access and vegetation clearing, installation of BMPs, equipment mobilization and material delivery, foundation construction, transmission pole placement and installation, conductor wire stringing and electrical equipment installation, and land restoration.

Construction access road improvements, grading, and setup of TCAs, along with vegetation work, will be conducted prior to construction of the transmission line. Proposed access roads will allow construction crews and vehicles to access transmission pole locations and TCAs.

Vegetation management within the transmission line ROW will be required prior to, or in conjunction with, construction. Trees and tall vegetation growing within or near the Pathway ROW can cause downed lines, power outages, and wildfire. Vegetation

management crews will work to prevent these situations from occurring. Vegetation management involves the use of various types of treatment including removing, pruning, and mowing vegetation and the treatment of vegetation with herbicides to ensure safe operations. The extent of this work will vary along the transmission line depending on the level of vegetation encroachment and additional ROW needs.

1.4.e.2 Transmission Line Construction

Once the pre-construction preparation work has been completed, work on the transmission lines will begin. The new transmission pole foundations will consist of concrete reinforced with steel that can range in diameter and depth based upon the subsurface conditions. Construction crews will begin drilling for transmission pole foundations. Reinforced concrete drilled pier foundations typically range from 6 to 9 feet in diameter and are drilled 20 to 40 feet deep. Once construction crews have drilled the hole for the new transmission pole, the foundation is installed, and the hole is backfilled.

Transmission poles will be placed using cranes. Crane installation will involve first hauling the transmission pole pieces to the location and then assembling the transmission poles at the installation locations and setting them with the crane. Once assembled, transmission poles will be transported by truck to installation locations and cranes will lift the transmission poles into place.

Once all the transmission poles are in place, the conductor wire and optical ground wire are strung using a temporary pulley system attached to the insulators. Conductor is pulled from one transmission pole to the next through a pulley system temporarily placed on the transmission pole. After a section of conductor is pulled through a series of transmission poles, the conductor is attached to insulators, which are attached to the transmission pole and the pulleys are removed. Trucks, heavy equipment, and helicopters are used in this process. FAA safety requirements may require residences near the transmission line to evacuate during helicopter use. Xcel Energy and the construction contractor will coordinate with the FAA during helicopter operations and obtain all required permits. Xcel Energy and the construction contractor will provide residents with prior notice if evacuation is required.

Other equipment including bird diverters, spacers, and anti-galloping devices are also installed as needed. TCAs will be located at specific angles to ensure the conductor wire is pulled in line with the transmission poles, remaining in alignment.

1.4.e.3 Construction Staffing, Vehicles, and Equipment

The first workers, vehicles, and equipment to mobilize for Pathway will conduct investigative fieldwork and prepare work areas for construction. Prior to construction and during the Pathway planning and design stages, soil borings are taken to understand the sub-surface conditions where Pathway facilities will be built. Geotechnical borings are

taken using bore drill rigs. Vegetation clearing may be conducted to meet requirements for conductor clearances, minimize potential ignition sources, and to provide access within the ROW. Tree clearing and other vegetation removal is completed with both manual and mechanized equipment and will take place on the identified access route and the area within the easement. Matting is utilized as needed in wet or soft areas to prevent compaction, minimize soil disturbance, and improve site safety.

It is anticipated that one 12-hour shift per day (Monday through Saturday) will be worked during transmission line construction, but additional hours may be required. This will be during daylight hours, early morning to early evening. If additional hours are anticipated for shift work, a 24-hour work permit will be obtained from El Paso County. The maximum number of construction workers on site at any one time at any work area will be approximately 95 total[1]. Transmission line construction is expected to be completed in phases over the duration of the construction schedule for each Pathway segment. The transmission line will not have any permanent on-site employees. The expected vehicle trips per day in El Paso County during transmission line construction is summarized in Table 5. The Transportation Memorandum is provided as Attachment I.

Table 5: Daily Vehicle Trips during Transmission Line Construction in El Paso County

Major Construction Tasks	Approximate Construction Duration (Weeks)	Approximate Daily Passenger Car Trips	Approximate Daily Truck trips by Vehicle Type	Approximate Total Daily Roundtrips
Transmission Line Construction				
Foundation Installation (~4 per day)	15 weeks	15	Flatbed trucks 5 Concrete trucks 28	48
Steel Pole Installation (~4 per day)	20 weeks	10	Flatbed and Semi-trucks 25	35
Conductor/Optical Ground Wire	24 weeks	5	Semi-trucks 15 Crane 1 Aerial Lifts 2	21

Upon completion, Pathway will be operated and monitored remotely 24 hours a day, 7 days a week, 365 days a year to provide safe and reliable electric service. The transmission line will be inspected regularly (at least annually) to look for the following:

- Non-compatible vegetation and hazards within the ROW.
- Equipment needing repair or replacement.
- ROW encroachments, which can be hazardous to safety and reliable operations.

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

- Anything that might jeopardize safe, reliable operation of the power line.
- Operations and maintenance staff must visit the ROW for these inspections, but visits typically are minimal, and landowners will be contacted prior to on-site inspections or maintenance. However, in cases of emergency, advanced contact may not be possible.

It is anticipated that an average of 30 trucks per day will be utilized during the construction of the transmission line for crews, spotting materials, framing poles, and erecting poles. Concrete truck deliveries will be made daily when the foundations and piers are being constructed. Multiple deliveries of concrete (up to 28 per day) will be required daily at certain stages of construction. Materials will be delivered to the laydown areas at the onset of construction. An additional 10 to 15 trucks will be needed to deliver steel poles, conductor, anchor bolts, and foundation materials daily to work areas. The impact to local public roads will vary day-by-day as construction moves along the Pathway transmission line route.

A crane, drill rig, concrete truck, boom trucks, trailers, transmission poles, steel casing, and rebar cages are equipment and materials that will be moved into the site for construction. The transmission poles are delivered by truck and assembled at the foundation site and set in place with the use of cranes and other heavy equipment. Trucks, heavy equipment and sometimes helicopters are used to install conductor wire after all transmission poles are erected in an area.

To mitigate any potential impacts to El Paso County roads, Xcel Energy will negotiate a Development Agreement with El Paso County. Traffic Control Plans will be prepared and followed during construction. A Transportation Memorandum is provided as Attachment I.

2 SUBMISSION REQUIREMENTS FOR ALL PERMIT APPLICATIONS (ARTICLE 2.303)

2.1 APPLICATION FORM (ARTICLE 2.303.1)

The completed application form can be found in Attachment A of this Application.

2.2 ADDITIONAL PLANS, STUDIES, SURVEY, OR OTHER INFORMATION (ARTICLE 2.303.2)

A description of Pathway facilities is provided in Section 1.4. In accordance with Section 2.303.2 of the El Paso County §1041 Regulations, 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 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.

2.3 NOTIFICATION TO MINERAL OWNERS (ARTICLE 2.303.3)

The "Surface Development Notification Act" (CRS 24-65.5-101 et seq.) was passed specifically to facilitate mineral owner agreements like those contemplated by 21-3-330(B)(2)(d) 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). That is because, generally speaking, transmission lines do not impact mineral interests. 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.

2.4 INFORMATION DESCRIBING THE APPLICANT (ARTICLE 2.303.4)

2.4.a Names, Addresses, Organizational Form of the Applicant (2.303.4.a)

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 2.303.4a 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

2.4.b Names, Addresses, and Qualifications of Individuals Responsible for Constructing and Building the Project (2.303.4.b)

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 be chosen prior to construction. 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.

Engineer:
Josh Peterson, P.E.
Principal Transmission Engineer
Xcel Energy
1800 Larimer Street, Suite 500
Denver, CO 80202
608-469-0216
Joshua.G.Peterson@xcelenergy.com

Operations:
Network Reliability Lead
18201 West 10th Ave.
Golden, CO 80401
303-273-4810

2.4.c Written Authorization of the Project Owner (2.303.4.c)

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

2.4.d Financial and Technical Capabilities of the Applicant (2.303.4.d)

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 and sufficiently demonstrated the need for Pathway. The CPUC evaluated extensive cost and schedule information in arriving at this decision. The full written approval and Xcel Energy's CPCN application with the CPUC can be found by visiting the E-Filings page on the CPUC website and entering Proceeding No. 21A-0096E in the Search field. 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. See additional discussion of financial feasibility in Section 2.9.

2.4.e Written Qualifications of the Report Preparers (2.303.4.e)

Qualifications of the Application preparers are provided in Table 6.

Table 6: 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.

Name	Address	Qualifications
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 400, 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 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.

2.5 INFORMATION DESCRIBING THE PROJECT (ARTICLE 2.303.5)

2.5.a Vicinity Map (2.303.5.a)

The vicinity map is provided in Attachment B.

2.5.b Executive Summary of the Proposal (2.303.5.b)

An executive summary of Pathway is provided in Section 1 of this Application.

2.5.c Plans and Specifications (2.303.5.c)

A description of Pathway facilities is provided in Section 1.4. The portion of the Pathway route in El Paso County is detailed in Attachment B. 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 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 Section 3 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 Section 5 of this Application.

2.5.d Alternatives to the Project (2.303.5.d)

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-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 ROWs, 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 1.2.b 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. 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).

2.5.e Schedules for Designing, Permitting, Constructing, and Operating the Project (2.303.5.e)

See Section 1.1 of this Application.

2.5.f Need for the Project (2.303.5.f)

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 full written approval and Xcel Energy's CPCN application with the CPUC can be found by visiting the E-Filings page on the CPUC website and entering Proceeding No. 21A-0096E in the Search field.

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 Sections 1.2.b and 2.5.d for additional information).

2.5.g Conservation Techniques (2.303.5.g)

See Section 2.22, Monitoring and Mitigation Plan, of this Application.

2.5.h Projected Demand (2.303.5.h)

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 will increase electric service safety and reliability, boost the regional economy, and create jobs during construction.

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.

2.5.i List of Adjacent Property Owners, and Mailing Addresses (2.303.5.i)

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

2.6 PROPERTY RIGHTS, OTHER PERMITS, AND APPROVALS (ARTICLE 2.303.6)

2.6.a Description of Property Rights (2.303.6.a)

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. 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.

2.6.b Federal, State, and Local Permits and Approvals (2.303.6.b)

Federal, state, and local permits/approvals may be required prior to construction of Pathway. A list of federal, state, and local permits and approvals that have been or will be required for Pathway is provided in Section 1.3. 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. 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.

State approvals may include, for example, permits for road, bridge and highway crossings or road occupancy permits from CDOT and stormwater discharge permits and APEN from CDPHE. Xcel Energy will negotiate easements with the Colorado State Land Board for the portions of the Pathway transmission line on state-owned lands.

2.6.c Federal and State Consultation Correspondence (2.303.6.c)

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 list 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 1.3.

Xcel Energy has conducted informal coordination with federal and state agencies including the U.S. Fish and Wildlife Service (USFWS) and Colorado Parks and Wildlife (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 7, and copies of coordination letters sent to USFWS and CPW are included with the Application materials.

Table 7: 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.

Type Coordination	Agency	Attendees	Date	Notes
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 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

Type Coordination	Agency	Attendees	Date	Notes
				was discussed and possible sharing of data to understand where the species may be a 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 Section 2.22 of this document.

2.7 LAND USE (ARTICLE 2.303.7)

2.7.a Map of Existing Land Use and Zoning (2.303.7.a)

A map showing existing land use and zoning is provided as Attachment F. That part of Pathway located within unincorporated El Paso County is in the Agriculture (A-35) zoning district. 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.

2.7.b Map of Affected Public Land Boundaries (2.303.7.b)

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 El Paso County Road 1 (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.

2.7.c Compliance with El Paso County Master Plan (2.303.7.c)

Pathway compliance with the 2021 El Paso County Master Plan (El Paso County 2021) is addressed in Table 8.

Table 8: 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 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

Goal, Policy, or Strategy	Pathway Compliance
	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 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

Goal, Policy, or Strategy	Pathway Compliance
	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.
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[2] will be needed for construction of Pathway transmission lines in El Paso County. Construction crews may reside in the area during construction.

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

Goal, Policy, or Strategy	Pathway Compliance
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.
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, Policy, or Strategy	Pathway Compliance
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 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.

Goal, Policy, or Strategy	Pathway Compliance
	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, funding, and planning.	Transmission lines are built and maintained to meet or exceed safety standards, such as those specified by the National Electrical Safety Code (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 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. 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.
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, minimize impacts of flooding, and	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. 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

Goal, Policy, or Strategy	Pathway Compliance
beautify El Paso County.	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 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

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	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 9.1 - Consider the environmental impacts related to natural resource	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

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conservation, air quality, water quality, wildlife habitat, and waste management during any planning process.	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 2.6.c) 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 regard to development and infrastructure.	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, 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.

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	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 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.
Goal 10.2 - Continue to support planning efforts and best practices to	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

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ensure community resiliency.	Attachment G, Soils, Geologic, and Natural Hazard Areas Map). See also the response to Goal 10.1.
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.

2.7.d Compliance with Regional and State Planning Policies (2.303.7.d)

The applicable regulatory framework is described in Section 1.4 and Table 3, 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.

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.

2.7.e Compliance with Federal Land Management Policies (2.303.7.e)

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 1.4 and Table 3.

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 2.6.c).

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.

2.7.f Agricultural Productivity of the Project Area (2.303.7.f)

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 or written evidence referenced above. Temporary impacts to agricultural activities are expected to be minor. 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.

Once in operation, Pathway will not create adverse impacts to the existing agricultural uses. During construction, minimal impacts to natural resources or agricultural lands will occur. 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.

2.7.g Probability of Project To Be Affected by Natural Hazards (2.303.7.g)

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. An analysis of potential impacts from potential natural hazards and risks from potential natural hazards is provided in Section 2.20 of this Application.

2.7.h Excess Service Capabilities to Generate Sprawl or Strip Development (2.303.7.h)

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.

2.7.i Demand for Project and Association with Existing Service Areas (2.303.7.i)

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.

2.8 SURFACE AND SUBSURFACE DRAINAGE ANALYSIS (ARTICLE 2.303.8)

A Preliminary Drainage Analysis is provided as Attachment L.

2.9 FINANCIAL FEASIBILITY OF THE PROJECT (ARTICLE 2.303.9)

2.9.a Bond Issue, Loan, or Financing Approvals (2.303.9.a)

Pathway is funded through CPUC-jurisdictional transmission rates, and therefore will not use any debt service. Xcel Energy will recover the retail share of capital costs associated with constructing the Pathway facilities through its Transmission Cost Adjustment, subject to the terms set forth in Xcel Energy's Transmission Cost Adjustment tariff. Xcel Energy will recover the share of costs associated with Pathway from wholesale transmission customers through its Federal Energy Regulatory Commission -jurisdictional transmission rates.

2.9.b Financial Feasibility (2.303.9.b)

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 written approval and Xcel Energy's application with the CPUC can be found by visiting the E-Filings page on the CPUC website and entering Proceeding No. 21A-0096E in the Search field. Regulatory documents associated with the project, including notices, filings, public comments, and more, are also available online. Filing materials can also be found on Colorado's Power Pathway Regulatory Filings webpage.

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.

2.10 LOCAL INFRASTRUCTURE AND SERVICES IMPACTS (ARTICLE 2.303.10)

No new or upgraded public services or facilities are anticipated to be needed to serve Pathway in El Paso County. 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. See additional discussion of emergency response in Sections 2.21 and 2.22 of this application.

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. 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.

2.11 RECREATIONAL OPPORTUNITIES (ARTICLE 2.303.11)

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.

2.12 AREAS OF PALEONTOLOGICAL, HISTORIC OR ARCHAEOLOGICAL IMPORTANCE (ARTICLE 2.303.12)

A desktop cultural resources review was completed in December 2022. 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. 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.

2.13 NUISANCE (ARTICLE 2.303.13)

Nuisance vibrations, glare, or odors are not anticipated during construction or operation of Pathway. Xcel Energy is required to meet state standards as outlined in 4 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.

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. If helicopters are utilized during construction, their use would be for a limited duration as required to accomplish specific activities. 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). If a nuisance arises during construction, the nuisance will be mitigated in coordination with El Paso County.

Indirect effects from post-construction activities, which include the noise from transmission line inspections and maintenance activities are anticipated to be negligible because of their short duration and infrequency.

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. 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 levels from the Pathway transmission line were deemed reasonable by the CPUC and not subject to further review.

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. 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.

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.

2.14 AIR QUALITY (ARTICLE 2.303.14)

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.

2.15 VISUAL QUALITY (ARTICLE 2.303.15)

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.

2.16 SURFACE WATER QUALITY (ARTICLE 2.303.16)

A desktop analysis of the portion of Pathway within El Paso County was completed to identify potentially jurisdictional wetlands and other WOTUS that may be subject to regulation under Section 404 of the 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 9, 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 9: 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
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 9, 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 Federal Emergency Management Agency (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 2.19 for additional information regarding floodplains.

2.16.a Map or Description of All Surface Waters (2.303.16.a)

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 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.

2.16.b Existing Data Monitoring Sources (2.303.16.b)

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

2.16.c Immediate and Long-Term Effect and Net Effects on Quantity and Quality of Surface Water (2.303.16.c)

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.

2.17 GROUNDWATER QUALITY (ARTICLE 2.303.17)

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.

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.

2.18 WATER QUANTITY (ARTICLE 2.303.18)

2.18.a Map and Description of Existing Stream Flows and Reservoir Levels (2.303.18.a)

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.

2.18.b Existing Minimum Stream Flows Held by the Colorado Water Conservation Board (2.303.18.b)

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

2.18.c Impacts and Net Effect of the Project on Water Quantity (2.303.18.c)

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. Pathway will not require water use during operation.

2.18.d Methods of Efficient Utilization of Water (2.303.18.d)

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.

2.19 FLOODPLAINS, WETLANDS, AND RIPARIAN AREAS: TERRESTRIAL AND AQUATIC ANIMALS, PLANT LIFE AND HABITAT (ARTICLE 2.303.19)

Details regarding wetlands and riparian areas are discussed in Section 2.18 Surface Water Quality.

2.19.a 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 10 notes the floodplain areas spanned by Pathway in El Paso County.

Table 10: 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

2.19.b 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 11 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 11: 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 Avian Power Line Interaction Committee (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 7 in Section 2.6.c. 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.

2.20 SOILS, GEOLOGIC CONDITIONS AND NATURAL HAZARDS (ARTICLE 2.303.20)

2.20.a Map or Description of Soils, Geologic Conditions, and Natural Hazards (2.303.20.a)

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.

2.20.b Risks to Project from Natural Hazards (2.303.20.b)

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. 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.

2.20.c Impacts and Net Effect of the Project on Soil and Geologic Conditions (2.303.20.c)

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.

2.21 HAZARDOUS MATERIALS (ARTICLE 2.303.21)

2.21.a Solid Waste, Hazardous Waste, Petroleum Products, Hazardous, Toxic, and Explosive Substances of Materials (2.303.20.a)

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.

2.21.b Location of Storage Areas for Equipment, Fuel, Lubricants, and Chemical and Waste Storage (2.303.20.b)

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.

2.22 MONITORING AND MITIGATION PLAN (ARTICLE 2.303.22)

Section 2.22 address 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 Table 12. 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.

Table 12: Proposed Mitigation Measures

Resource	Description of Avoidance of Impacts or Proposed Mitigation
Agriculture	During construction, minimal permanent impacts to agricultural lands will occur. Disturbed areas will be revegetated following construction. Disturbed areas will be returned to pre-construction conditions or reseeded according to landowner requests and El Paso County requirements. Agricultural use can continue for these lands except the footprint of each transmission pole.

Resource	Description of Avoidance of Impacts or Proposed Mitigation
	Permanent Pathway facilities will be limited to the footprint of the individual transmission poles and transmission access roads.
Air Quality	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 access roads as per coordination with El Paso County. If necessary, Xcel Energy will apply for an APEN for land development prior to construction and follow state standards to control the release of fugitive dust related to construction. An APEN will be required for a disturbance greater than 25 contiguous acres and land development activities longer than 6 months.
Biological Resources	Pathway will avoid or minimize impacts to habitat as practicable. Impacts to most vegetation will be temporary and limited to the 150-foot-wide ROW and TCAs. The ROW will be cleared of tall vegetation for ongoing maintenance. Measures will be implemented to minimize the spread of noxious weeds in the ROW (Attachment D). To avoid or minimize impacts to aquatic habitat within the ROW, surface waters, riparian areas, and wetlands in areas at a crossing will be spanned as practicable. Pathway will adhere to BMPs and erosion control measures outlined in the SWMP. 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. 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 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 APLIC guidelines (APLIC 2006). Bird flight or swan diverters or other marking devices may be used as determined necessary for specific locations. Xcel Energy will continue to coordinate with USFWS and CPW to address concerns regarding wildlife impacts throughout planning, design, and construction of Pathway, and will comply with all regulatory requirements.
Electric and Magnetic Fields	A Noise and EMF Study was conducted for Pathway and submitted as part of Pathway's CPCN application, Proceeding

Resource	Description of Avoidance of Impacts or Proposed Mitigation
	No. 21A-0096E (Attachment E). The study concluded that magnetic field levels at the edge of the Pathway transmission line ROW are projected to be 54.7 milligauss (mG). These levels are below 150 mG and were deemed reasonable by the CPUC. No related impacts to human health and safety are anticipated.
Land Use	The Land Use and Zoning Map is provided as Attachment F. Pathway will not cause a significant change in land use in the immediate area. Permanent Pathway facilities will be limited to the footprint of the individual transmission poles and transmission access roads. Current land use can continue for these lands except the footprint of each transmission pole.
Noise	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). Based on the Noise and 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 dBA. Per Rule 3206(f) of 4 CCR 723-3, noise levels below 50 dBA are not subject to further review. The projected noise levels from Pathway were deemed reasonable by the CPUC and not subject to further review.
Natural Hazards	A map of soils, geologic conditions, and natural hazards is included in Attachment G. No areas of natural hazards are located near Pathway. 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 built and maintained to meet or exceed safety standards, such as those specified by the National Electrical Safety Code (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 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. Transmission lines are structurally designed according to the NESC, which incorporates standards from the American Society of Civil Engineers on structural loading. The NESC requires poles over 60 feet tall to be able to resist the loading from various ice and wind scenarios. The base design wind speed for eastern Colorado is 95 miles per hour. This wind speed is part of an

Resource	Description of Avoidance of Impacts or Proposed Mitigation
	equation that also considers terrain, span length between transmission poles, and transmission pole height to produce an overall wind pressure applied to the wires and the transmission pole. In addition, the design scenario considers how the structural capacity of a transmission pole is affected by the icing conditions on the wire. The weight of the ice increases the tension in the wires and therefore the loading on the transmission pole. The result of this design scenario is that transmission lines typically have additional structural capacity for much higher wind speeds than the NESC requires after accounting conservatively for icing conditions. Xcel Energy's transmission lines are monitored 24 hours a day, 7 days a week, 365 days a year 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. Xcel Energy's facilities are designed, constructed, operated, and maintained to meet or exceed all applicable requirements of the 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 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. Xcel Energy's Emergency Response Procedures are provided as Attachment H.

Resource	Description of Avoidance of Impacts or Proposed Mitigation
Cultural Resources	No previously recorded NRHP-eligible cultural resources have been recorded along Pathway in El Paso County. Therefore, the transmission line will not have adverse effects on cultural resources.
Socioeconomic	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. Pathway will deliver economic benefits to rural communities across eastern and southern Colorado, including El Paso County, over the short and long-term.
Soils and Geology	A map of soils, geologic conditions, and natural hazards is included in Attachment G. No areas of geologic hazards are located near Pathway. Geotechnical studies are conducted for transmission poles to identify subsurface conditions and determine foundation specifications. To avoid potential indirect impacts from construction-related erosion and sediment movement during construction, Pathway will adhere to BMPs outlined in the SWMP, which will include erosion control and revegetation measures.
Toxic and Hazardous Substances	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. Activities will follow BMPs for the management of waste to avoid and minimize effects from potential spills or other releases to the environment.
Transportation	The Transportation Memorandum is provided as Attachment I. Traffic Control Plans will be developed in areas where travel on roadways could be impacted during construction. Construction updates and schedules will be discussed with local government officials as needed, as details are determined. Necessary road use and ROW permits will be obtained from El Paso County and from CDOT for state highway/interstate crossings as needed prior to construction.
Vegetation	Pathway will avoid or minimize impacts to vegetation as practicable. Impacts to most vegetation will be temporary and limited to the 150-foot-wide ROW and TCAs. The ROW will be cleared of tall vegetation for ongoing maintenance. Measures will be implemented to minimize the spread of noxious weeds in the ROW (Attachment D). To avoid or minimize impacts to aquatic habitat within the ROW, surface waters, riparian areas, and

Resource	Description of Avoidance of Impacts or Proposed Mitigation
	wetlands in areas at a crossing will be spanned as practicable. Pathway will adhere to BMPs and erosion control measures outlined in the SWMP. 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.
Visual Resources	Pole Details, Representative Photographs, and Simulations are provided in Attachment J. The type of steel used will be weathering steel, which oxidizes to resemble a natural brown look and is not shiny. 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 to pre-construction conditions.
Water Resources	The Water Resources Map is provided in Attachment K. 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. 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 to protect wetlands from rutting. Prior to construction, a SWMP will be prepared according to the CDPHE requirements. To avoid

Resource	Description of Avoidance of Impacts or Proposed Mitigation
	potential indirect impacts from construction-related erosion and sediment movement during construction, Pathway will adhere to BMPs outlined in the SWMP, which will include erosion control and revegetation measures. Construction activities will be performed in a manner that prevents 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. Impacts to water quality will be minimized during construction through BMPs and the site-specific SWMP. Xcel Energy will comply with permit application requirements, El Paso County standards, and construction protocol to ensure that Pathway does not violate water quality standards.

2.23 ADDITIONAL INFORMATION (ARTICLE 2.303.23)

Xcel Energy will provide additional information related to Pathway as required by the Planning Director.

3 REVIEW CRITERIA FOR ALL APPLICATIONS (2.405)

In accordance with Section 2.405 of the El Paso County §1041 Regulations, the information in Table 13 describes how Pathway routing and site selection, construction, maintenance, and operation comply with the approval criteria for the Permit Authority approval of the portion of the transmission line subject to this Application. Each criterion for all applications from Section 2.405 is listed, followed by a description of how Pathway will comply.

Table 13: Pathway Compliance with Review Criteria for All Applications (Section 2.405 of the El Paso County §1041 Regulations)

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
2.405.1	The health, welfare and safety of the citizens of this County will be protected and served.	Pathway is a necessary capital improvement to expand the existing electric transmission grid system in Colorado. The location, construction, and operation of Pathway will comply with applicable federal, state, and local regulations. Pathway facilities will be designed, constructed, operated, and maintained to meet applicable standards of design and performance set forth in the National Electric Safety Code. Pathway will be designed to minimize the risks from natural hazards, such as high winds and floods. Additional information on design and hazard avoidance and mitigation is provided in Section 2.21.
2.405.2	The proposed activity is in general conformance with the El Paso County Master Plan, Water Quality Management Plan, NPDES Phase II Permit, or other duly adopted plans of El Paso County. The determination of conformance of the Project with these plans may include but is not limited to the following considerations: a. Likelihood that the Project will/will not cause or	There are no known conflicts with the El Paso County Master Plan. A detailed discussion of Pathway compliance with the El Paso County Master Plan is provided in Section 2.7.c. A summary of Pathway compliance with the chapters of the El Paso County Master Plan is as follows: • Land Use and Housing & Communities: Pathway is compatible with agricultural uses and is sited to minimize impacts to existing agricultural operations. Pathway will also not require additional community or

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
	contribute to urban sprawl or "leapfrog" development. b. Significant changes in the amount of impervious surfaces. c. Contiguity of development associated with the Project to existing growth centers. d. Changes to unique land forms. e. Changes in the amount or character of open space. f. Changes to traffic patterns, road capacity and congestion.	local government services beyond those currently provided in the area. • Economic Development: Pathway will deliver economic benefits to rural communities across eastern and southern Colorado, including El Paso County, over the short and long-term. Pathway coordinated with Schriever Space Force Base and the U.S. Air Force to determine that the route is compatible with existing and future operations associated with their facilities. • Transportation & Mobility: Pathway is not a transportation project and during construction, temporary traffic impacts are expected to be minor. • Community Facilities and Infrastructure: 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. 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. Pathway will utilize erosion and sediment control BMPs to minimize impacts to nearby waterways. • Military: Pathway coordinated with Schriever Space Force Base and the U.S. Air Force to determine that the route is compatible with existing and future operations associated with their facilities. • Recreation & Tourism: Pathway will not impact existing trails or recreation. • Community Health and Environment: By working with individual landowners, obtaining, and meeting applicable federal state and county permits, co-locating the transmission line route, or strategically

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
		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 and mitigates and minimizes to the furthest extent possible the impacts to the environment. • Resiliency & Hazard Mitigation: Xcel Energy's facilities are designed, constructed, operated, and maintained to meet or exceed all applicable requirements of the IEEE standards and accepted industry standards and practices. The proposed Pathway alignment through unincorporated El Paso County is generally located in areas with low risks from both natural and human-caused hazards. Xcel Energy coordinates closely with local fire departments and first responders and consults with them to discuss any concerns within their response area. Pathway complies with the Pikes Peak Area Council of Governments Water Quality Management Plan (PPACG 2020). 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

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
		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. a. The proposed density and intensity of development will maintain current agricultural areas. Pathway will not directly cause significant changes in land use intensity or development in the immediate area. Construction and operation of the transmission line will not interfere with continued use of the surrounding areas for agricultural uses. After construction, current uses adjacent to Pathway facilities will be able to continue and preserve desirable community and rural patterns. b. Construction of the transmission line will not create runoff beyond previous site levels, will not

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
		change existing topography, or adversely affect drainage. No alteration in the pattern or intensity of surface drainage will result from the construction or operation of the transmission line. Once construction has been completed, disturbed areas will be restored in a manner similar to pre-construction conditions. c. Pathway is not located near any residential areas or growth centers. Pathway will install necessary infrastructure while minimizing impact on surrounding land. The impacted surface use owners can continue to maintain their current agricultural uses, except under the footprint of the individual transmission poles. Pathway has been routed to minimize impacts on individual landowners; factors evaluated during siting of the transmission line include proximity to property boundaries and built structures and adjacency to other existing utility easement corridors and road ROW. d. Pathway will not result in changes to unique land forms. No significant natural hazards have been identified in the areas planned for Pathway development in El Paso County. Professional engineers will guide construction and do not foresee any unusual risks. e. Pathway will not result in changes to the amount or character of open space. By working with individual landowners, collocating the transmission line route, or strategically routing adjacent to other existing public infrastructure improvements, the Pathway alignment has

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
		minimized the impacts to adjacent agricultural and rangeland uses to the extent practical. f. Construction of Pathway is not expected to cause significant effects to El Paso County transportation, and any impacts will be temporary in nature. Work crews will mobilize each day from the laydown yard to the work areas. Traffic to local work areas will be limited to supervisory vehicles transporting work crews, required construction equipment, and equipment delivery vehicles. Construction equipment or labor transportation are not anticipated to have a significant impact on traffic volumes or flow on local roadways or state/county highways. Any increases in traffic will be short term and limited to the construction time period near individual transmission poles. The Transportation Memorandum is provided as Attachment I.
2.405.3	The Project is financially feasible. The determination of financial feasibility of the Project may include but is not limited to the following considerations: a. The business plan submitted by the applicant. b. Relevant bond issue, loan and other financing approval or certifications (ex: approved bond issue; bond counsel opinion).	The applicant has the financial 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.
2.405.4	The Project is not subject to significant risk from natural hazards. The determination of risk from natural hazards to the Project may include but is not limited to the following considerations: a. Faults and fissures.	a – c. 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 (see the Soils, Geologic, and Natural Hazard Areas Map in Attachment G).

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
	b. Unstable slopes including landslides, rock slides and avalanche areas. c. Expansive or evaporative soils and risk of subsidence. d. Wildfire hazard areas. e. Floodplains.	d. Xcel Energy's facilities are designed, constructed, operated, and maintained to meet or exceed all applicable requirements of the 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 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. Xcel Energy's Emergency Response Procedures are provided as Attachment H. e. The Pathway alignment subject to this Application will cross 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

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
		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.
2.405.5	The Project will not have a significant adverse effect on the capability of local governments affected by the Project to provide local infrastructure and services, or exceed the capacity of service delivery systems. The determination of the effects of the Project on local government services may include but is not limited to the following considerations: a. Current and projected capacity of roads, schools, infrastructure, drainage and/or stormwater infrastructure, housing, and other services necessary to accommodate development, and the impact of the Project upon the current and projected capacity. b. Changes caused by the Project in the cost of providing education, transportation networks, water treatment and wastewater treatment, stormwater drainage, channel stabilization, bridges, emergency	No new or upgraded public services or facilities are anticipated to be needed to serve Pathway in El Paso County. Impacts to schools, water and wastewater treatment, water supply, emergency services, transportation, and other local infrastructure are not anticipated as a result of Pathway. Where feasible, the Pathway route through El Paso County is co-located along existing infrastructure to minimize impacts to the surrounding area (see 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. During construction, temporary impacts to local roads will vary day-by-day as the construction moves along the route. Temporary overland access for the transmission line will occur within the acquired Pathway ROW.

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
	services, or other governmental services or facilities. c. Need for temporary roads to access the Project for construction and maintenance. d. Change in demand for public transportation.	
2.405.6	The Project will not have a significant adverse effect on the quality or quantity of recreational opportunities and experience. The determination of effects of the Project on recreational opportunities and experience may include but is not limited to the following considerations: a. Changes to existing and projected visitor days. b. Changes in quality and quantity of fisheries. c. Changes in instream flows or reservoir levels. d. Changes in access to recreational resources. e. Changes to quality and quantity of hiking, biking, or horseback riding trails. f. Changes to hunting experiences. g. Changes to open space. h. Changes to existing conservation easements. i. Changes to regional or neighborhood parks.	No recreational resources, including powerline trails, are proposed as a part of Pathway. Pathway will not impact the quality or quantity of recreational opportunities and experiences. No changes to fisheries, reservoir levels, open space, or existing conservation easements are anticipated (see the Land Use and Zoning Map, Attachment F).
2.405.7	The Project will not significantly degrade air quality. The determination of effects of the	Short-term effects are anticipated from a temporary increase in fumes and fugitive dust. The short-term

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
	Project on air quality may include but is not limited to the following considerations: a. Changes in visibility and microclimates. b. Applicable air quality standards.	effects are not expected to result in changes to visibility and microclimates and will not violate applicable air quality standards. Xcel Energy will obtain the appropriate construction Air Pollutant Emissions Notice prior to construction if necessary and will follow state standards to control the release of fugitive dust related to construction. During operation, Pathway will not generate trips in excess of those currently experienced as the transmission line will not be staffed. Visits from personnel will be limited to emergencies or maintenance and inspection activities and increased fumes, exhaust and dust during operation is not expected.
2.405.8	The Project will not significantly degrade existing visual quality. The determination of visual effects of the Project may include but is not limited to the following considerations: a. Visual changes to ground cover and vegetation, waterfalls and streams, or other natural features. b. Interference with viewsheds and scenic vistas. c. Changes in landscape character types of unique land formations. d. Compatibility of structure size and color with scenic vistas and view sheds. e. Changes to open space. f. Changes to existing conservation easements. g. Changes to impacts to regional or neighborhood parks.	Pathway's route through El Paso County has been co-located along existing transmission infrastructure and county roads as much as possible to reduce visual impacts (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. In addition, the weathering steel poles will oxidize to resemble a natural brown look and existing vegetation will be preserved to the extent possible to maintain visual contrast in the landscape. 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 structures in the viewshed. Pole Details, Representative Photographs, and Simulations are provided in Attachment J.

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
2.405.9	The project will not significantly degrade surface water quality. The determination of effects of the Project on surface water quality may include but is not limited to the following considerations: a. Changes to existing water quality, including patterns of water circulation, temperature, conditions of the substrate, extent and persistence of suspended particulates and clarity, odor, color or taste of water. b. Applicable narrative and numeric water quality standards. c. Changes in point and nonpoint source pollution loads. d. Increase in erosion. e. Changes in sediment loading to waterbodies. f. Changes in stream channel or shoreline stability. g. Changes in stormwater runoff flows. h. Changes in trophic status or in eutrophication rates in lakes and reservoirs. i. Changes in the capacity or functioning of streams, lakes or reservoirs. j. Changes to the topography, natural drainage patterns, soil morphology and productivity, soil	Construction of the transmission line will not create runoff beyond previous site levels, will not change existing topography, or adversely affect drainage. No alteration in the pattern or intensity of surface drainage will result from the construction or operation of the transmission line. Once construction has been completed, restoration will resume pre-project conditions. A Preliminary Drainage Analysis is provided in Attachment L. The transmission line will be sited to span floodplains, wetlands, and riparian areas to the extent practicable. Pathway will adhere to BMPs outlined in the SWMP, which will include erosion control and revegetation measures. The transmission line will span or avoid any wetlands, streams, lakes, and reservoirs as possible. Pathway will obtain a Floodplain Development Permit for each FEMA-designated floodplain crossing from the Pikes Peak Regional Building Department Floodplain Management Office, and conditions of approval will be followed during construction. No surface water quality impacts are anticipated.

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
	erosion potential, and floodplains. k. Changes to stream sedimentation, geomorphology, and channel stability. l. Changes to lake and reservoir bank stability and sedimentation, and safety of existing reservoirs.	
2.405.10	The Project will not significantly degrade groundwater quality. The determination of effects of the Project on groundwater quality may include but is not limited to the following considerations: a. Changes in aquifer recharge rates, groundwater levels and aquifer capacity including seepage losses through aquifer boundaries and at aquifer-stream interfaces. b. Changes in capacity and function of wells within the impact area. c. Changes in quality of well water within the impact area.	Pathway will not impact aquifers or wells. Pathway design and construction will mitigate impacts to groundwater contamination to the extent practicable. Pathway will not generate pollutant loads during construction or operation therefore no long-term impacts to groundwater will occur. 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. A Preliminary Drainage Analysis is provided in Attachment L.
2.405.11	The Project will not significantly degrade wetlands and riparian areas, terrestrial or aquatic plant or animal life. The determination of effects of the Project on these areas shall include the considerations raised in the applicable federal and/or state Permits.	Pathway design and construction will mitigate impacts to wetlands and other surface and groundwater contamination to the extent practicable. Potential WOTUS will be avoided to the extent practicable. The span between transmission line poles can be sited to avoid placement within sensitive areas and span across wetlands and other WOTUS features to avoid permanent impacts (see the Water Resources Map, Attachment K). Pathway is not anticipated to result in any permanent impacts to wetlands or other WOTUS features.

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
		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. There will be no alteration in the pattern or intensity of surface drainage or any impacts to lakes or reservoirs as a result of construction or operation of the transmission line. Sensitive natural resource areas, including wetlands and critical habitats for wildlife, were specifically considered as part of the routing and siting analysis when identifying the preferred location for the transmission line to minimize potential interference from Pathway facilities (see the Routing and Siting Study for Segment 5, Attachment C). Xcel Energy has communicated with CPW and USFWS representatives regarding Pathway and will continue to coordinate with them throughout design and construction of Pathway and comply with all applicable regulatory requirements. Pathway will obtain a Floodplain Development Permit for each FEMA-designated floodplain crossing from the Pikes Peak Regional Building Department Floodplain Management Office, if necessary. Pathway will adhere to BMPs outlined in the SWMP, which will include erosion control and revegetation measures.
2.405.12	The Project will not significantly deteriorate soils and geologic conditions. The determination of effects of the Project on soils and geologic conditions may include but is not limited to the following considerations: a. Loss of topsoil due to wind or water forces b. Changes in soil erodibility	No significant natural hazards have been identified in the areas planned for Pathway development in El Paso County (see the Soils, Geologic, and Natural Hazard Areas Map, Attachment G). Professional engineers do not foresee any unusual risks. Pathway will be constructed based on the result of geotechnical studies to effectively site transmission poles and avoid geological hazards. During construction, Xcel Energy's contractor will minimize any soils impacts by strictly adhering to a SWMP regulated by CDPHE and will institute and

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
	c. Physical or chemical soil deterioration d. Terrain deformation/mass wasting/subsidence e. Compacting, sealing and crusting f. Waterlogging g. Soil morphology and productivity	maintain erosion and sediment control BMPs designed to protect soils and prevent erosion.
2.405.13	The Project will not cause a nuisance. The determination of nuisance effects of the Project may include but is not limited to the following considerations: increase in odors, dust, fumes, glare, heat, noise, vibration or artificial light.	Nuisance vibrations, odors, glare, artificial light, and heat are not anticipated during construction or operation of Pathway. Short-term effects are anticipated from a temporary increase in construction vehicles which may increase dust and fumes. These are not expected to cause a public nuisance. If a nuisance arises during construction, the nuisance will be mitigated in coordination with El Paso County. The Noise and EMF Study is provided as Attachment E. The projected noise levels from the Pathway transmission line were deemed reasonable by the CPUC and not subject to further review.
2.405.14	The Project will not result in unreasonable risk of releases of hazardous materials. The determination of the risk of release of hazardous materials caused by Project may include but is not limited to the following considerations: a. Plans for compliance with federal and state handling, storage, disposal, and transportation requirements. b. Use of waste minimization techniques. c. Adequacy of spill prevention and response plans.	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 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. Activities will follow BMPs for the management of wastes to avoid and minimize effects from potential spills or other releases to the environment.

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
2.405.15	Urban development, population densities, and site layout and design of storm water and sanitation systems shall be accomplished in a manner that will prevent the pollution of aquifer recharge areas. The determination of potential for pollution of the aquifer recharge areas by the Project may include but is not limited to the following considerations: a. Proximity of urban development and population densities to aquifer recharge areas. b. Proximity of stormwater and sanitation systems to aquifer recharge areas. c. Changes in water quality in the aquifer recharge areas.	Pathway is not an urban development project and will not require permanent storm water or sanitation systems in El Paso County. Pathway will not impact aquifers (see response to 2.405.10).
2.405.16	The Project shall be reasonably necessary to meet projected community development and population demands in the areas to be served by the Project, or to comply with regulatory or technological requirements. The determination of whether the Project is reasonably necessary may include but is not limited to the following considerations: a. Relationship to reasonable growth projections and local land use plans. b. Relationship to other providers' service areas. c. Whether the Project is not in compliance with regulatory or technological requirements or will	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. The design and need of Pathway have been approved by the CPUC and represents the use and application of best

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
	not be in compliance in the near future.	technology and industry standards for transmission and transformation of electric energy. All necessary land use, environmental, and construction permits, approvals, and authorizations will be obtained prior to construction as required, and BMPs will be implemented.

4 SITE SELECTION AND CONSTRUCTION OF MAJOR FACILITIES OF A PUBLIC UTILITY APPLICATION SUBMITTAL REQUIREMENTS (ARTICLE 2.5.201)

4.1 VICINITY MAP (5.201.1.A-D)

Attachment B provides a vicinity map of Pathway.

4.2 TYPE OF FACILTY (5.201.2)

4.2.a Voltages and Lengths of Transmission Lines (5.201.2.a)

The new 345-kV double circuit transmission line will be approximately 45 miles long in El Paso County. See Section 1.4.a for additional description of the transmission line.

4.2.b Types of Poles Used (5.201.2.b)

See Section 1.4.a for the description of the transmission poles. Pole details, representative photographs, and simulations are provided in Attachment J.

4.2.c Power Source and Generating Capacity (5.201.2.c)

No generation is proposed.

4.2.d Functions and Sizes of Substations (5.201.2.d)

Substations are not proposed as part of Pathway in El Paso County.

4.2.e Diameters and Lengths of Pipelines (5.201.2.e)

Pipelines are not proposed as part of Pathway.

4.2.f Storage Capacities of Storage Tanks and Types of Petroleum Derivatives (5.201.2.f)

No petroleum derivative will be stored permanently. Fuel tanks equipped with spill protection will be stored temporarily at laydown yards during construction.

4.2.g Corridor Locations and Dimensions (5.201.2.g)

The proposed transmission line corridor subject to this 1041 Application is shown on the Vicinity Map in Attachment B. The proposed transmission line route in El Paso County is generally oriented in a north to south direction in the area south of Simla, near the El Paso/Lincoln county line. The new transmission line will be constructed within a 150-foot-wide ROW.

4.2.h Service Area (5.201.2.h)

Pathway is an addition to Colorado's backbone transmission system. As such, it will serve as an integral part of Colorado's open transmission system carrying electricity not only generated by Xcel Energy but by utilities and cooperatives around the state, benefiting everyone who uses electricity.

4.3 RESOURCE AREA (5.201.3)

No generation is proposed. Pathway does not connect to a specific power source. Facilities in El Paso County are part of the larger Pathway that creates a transmission "loop" to provide additional transmission capacity. Pathway is being routed through some of the best wind and solar resource zones in Colorado. New renewable energy generation is anticipated to be developed in these zones. The location of these new generation resources is currently unknown until Xcel Energy's Electric Resource Plan process has been completed. Generally, new generation resources are expected to interconnect at substations located at segment endpoints.

4.4 PROJECTED DEVELOPMENT SCHEDULE (5.201.4)

4.4.a Timetable for Planning (5.201.4.a)

A timetable for obtaining required federal, state, and local permits is described in Section 1.3.

4.4.b Estimate of Construction and Operational Schedule (5.201.4.b)

The estimated construction timeline for each segment and related substation, and anticipated in-service dates are shown in Figure 2 and Table 2 in Section 1.1.

Transmission line Segment 5 is anticipated to be completed in 2027. Many variables factor into the schedule for projects of this magnitude. The construction schedule is contingent on acquiring all necessary land rights, permits, labor, and materials. Pathway will be constructed and placed in-service in phases.

Table 14 shows the estimated maximum number of employees, number of shifts, and employees per shift during the construction and operation and maintenance phases of Pathway.

Table 14: Employees and Shifts per Phase (Estimated)

Construction Phase	Employees	Shifts	Employees per Shift
Construction	Up to 95 employees for transmission line	One 12-hour shift (Monday to Saturday)	Up to 95 employees
Operations	None; the facilities are unstaffed with the exception of remote monitoring	Remotely monitored 24/7/365	None
Maintenance	2-6 employees	1 to 2 times a month, as needed	2 to 6 employees

4.5 HAZARDS AND EMERGENCY PROCEDURES (5.201.5)

4.5.a Fire, Explosion, or Other Dangers to Employees and General Public (5.201.5.a)

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 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.

Xcel Energy and their construction contractor will comply with Occupational Safety and Health Administration requirements and worker safety plans to address employee safety.

4.5.b Environmental Damage from Solid Waste, Hazardous Waste, Petroleum Products, Hazardous, Toxic, and Explosive Substances of Materials (5.201.5.b)

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 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 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. Activities will follow BMPs for the management of wastes to avoid and minimize effects from potential spills or other releases to the environment.

Short-term, temporary increases in fugitive dust and construction equipment exhaust (fumes) are anticipated during construction activities. These are not expected to degrade air quality. 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.

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.

Pathway will be constructed and operated in a manner to not cause hazards of environmental damage and contamination due to solid waste, petroleum products, or hazardous, toxic, and explosive substances and materials.

4.5.c Emergency Procedures (5.201.5.c)

Xcel Energy's facilities are designed, constructed, operated, and maintained to meet or exceed all applicable requirements of the 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.

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 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. Xcel Energy's powerlines are monitored and controlled remotely from an operations center where event response is coordinated.

4.6 ANALYSIS OF NON-STRUCTURAL ALTERNATIVES (5.201.6)

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. The existing infrastructure is not adequate to meet demand. Therefore, no non-structural alternatives are viable.

4.7 ANALYSIS OF STRUCTURAL ALTERNATIVES (5.201.7)

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 Colorado Revised Statute 29-20-108(4)(a) and (b)). The Routing and Siting Study for Segment 5 is included in Attachment C and provides an alternatives analysis to address the requirement.

Determining the location of the preferred route was accomplished through an extensive process described in Section 1.2.b 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. 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).

4.8 NEED FOR THE PROPOSED DEVELOPMENT (5.201.8)

4.8.a Population of the Area To Be Served (5.201.8.a)

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.

4.8.b Predominant Type of Users or Communities To Be Served (5.201.8.b)

Pathway is an addition to Colorado's backbone transmission system and part of Xcel Energy's $1.7 billion investment to improve the state's electric grid and enable future renewable energy development around the state. As an essential addition to Colorado's open transmission system, Pathway will carry electricity not only generated by Xcel Energy but by utilities and cooperatives around the state, benefiting everyone who uses electricity.

4.8.c Percentage of Current Operational Design Capacity (5.201.8.c)

The current electric transmission facilities in the Eastern Plains region of Colorado do not have adequate capacity to meet the forecasted demand of 3,000 to 3,500 megawatts. See additional discussion in Section 4.8.e.

4.8.d Explanation of Excess Service Capacity and Cost of Excess Capacity (5.201.8.d)

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 help to meet the state's growing electricity needs, improve safety, reliability, and affordability, and enable the transition to clean energy. 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.

In March 2021, Xcel Energy filed a CPCN to the CPUC describing the purpose, need, and public benefits of constructing Pathway. In June 2022, CPUC provided written approval of the CPCN for Segments 1 through 5 based on a determination that Pathway is in the public interest.

4.8.e Applicant's Long-Range Planning and Capital Improvement Program (5.201.8.e)

Pathway will support Xcel Energy's Clean Energy Plan (Xcel Energy 2021) that is estimated to deliver as much as an 85 percent reduction in carbon dioxide emissions by 2030 and add approximately 6,500 megawatts of new wind, solar, and other resources. 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.

4.8.f User Needs and User Patterns To Be Fulfilled (5.201.8.f)

See Section 4.8.d.

4.8.g Relationship of Project to Other Existing and Planned Utility Facilities, Communication or Energy Generation and Transmission Facilities, Local Government Capital Improvement Programs, and Special District Expansion Programs (5.201.8.g)

Pathway is a backbone transmission system that will support Xcel Energy's Clean Energy Plan (Xcel Energy 2021) that is estimated to deliver as much as an 85 percent reduction in carbon dioxide emissions by 2030 and add approximately 6,500 megawatts of new wind, solar, and other resources. Pathway will help to meet the state's growing electricity needs, improve safety, reliability, and affordability, and enable the transition to clean energy. 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. See additional discussion in Section 1 of this 1041 Application.

Pathway is not related to local government capital improvement programs or special district expansion programs.

4.9 ENVIRONMENTAL IMPACT ANALYSIS (5.201.9)

4.9.a Land Use (5.201.9.a)

Land Use is discussed in detail in Section 2.7. The Land Use and Zoning Map is provided as Attachment F.

4.9.a.1 Utilization of Existing Easements or Rights-of-Way (5.201.9.a.i)

Where feasible, the Pathway route through El Paso County is collocated 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. Pathway is sited in areas already encumbered by linear facilities and does not prohibit adjacent development. A map showing existing transmission lines (115-kV or greater) within El Paso County is provided as Attachment N.

4.9.b Other Utility Facilities (5.201.9.b)

4.9.b.1 Map of Existing Major Facility of Public Utilities within the County (5.201.9.b.i)

A map showing existing transmission lines (115-kV or greater) within El Paso County is provided as Attachment N.

4.9.b.2 Design Capacity, Excess Capacity, and Percentage of Operational Capacity of Each Major Facility of Public Utilities within the County (5.201.9.b.ii)

The current electric transmission facilities in the Eastern Plains region of Colorado do not have adequate capacity to meet the forecasted demand of 3,000 to 3,500 megawatts. The operating capacity of the existing transmission lines is reflected in Attachment N. See additional discussion in Section 4.8.e.

4.9.b.3 Upgrades to Current Facilities to Accommodate Increase in Demand (5.201.9.b.iii)

The current electric transmission facilities in the Eastern Plains region of Colorado do not have adequate capacity to meet the forecasted demand of 3,000 to 3,500 megawatts. See additional discussion in Section 4.8.e.

4.10 REQUIREMENTS FOR SITE SELECTION AND CONSTRUCTION OF POWER PLANTS (5.201.10)

Pathway is not a proposed power plant; therefore, this requirement does not directly apply to Pathway.

4.11 REQUIREMENTS FOR SITE SELECTION AND CONSTRUCTION OF TRANSMISSION LINES (5.201.11)

4.11.a Electromagnetic Field Measurements (5.201.11.a)

Pathway facilities will be designed, constructed, operated, and maintained to meet or exceed applicable standards of design and performance set forth in the National Electrical Safety Code.

EMF exist wherever electricity is produced or used, including around any electric appliance or wire that conducts electricity. Electric fields are created by voltage—the higher the voltage, the stronger the field. Anytime an electric appliance is plugged in, even if it is not on, an electric field is created in its vicinity. Electric fields are easily blocked by walls, trees, clothes, and skin. The farther the distance from the source of the electric field, the weaker it becomes. EMF extend outward from the conductor wire and decrease rapidly with distance from the conductor. There is no federal standard for transmission line EMF. Additional information is available online at Transmission-EMF-Fact-Sheet.pdf (coloradospowerpathway.com).

A Noise and EMF Study was conducted for Pathway and submitted as part of Pathway's CPCN application and is included as Attachment E. The study concluded that magnetic field levels at the edge of the Pathway transmission line ROW are projected to be 54.7 mG. These levels are below 150 mG and were deemed reasonable by the CPUC.

4.11.b Compliance with CCR 723-3 Section 3206(9)(b) (5.201.11.b)

The routing and siting study process used to locate Pathway facilities in El Paso County is provided in Attachment C of this 1041 Application. In June 2022, the CPUC provided

written approval for the CPCN for Pathway Segments 1 through 5, determining Pathway is in the public interest and in compliance with relevant CPUC rules and regulations.

5 REVIEW CRITERIA FOR SITE SELECTION AND CONSTRUCTION OF MAJOR FACILITIES OF A PUBLIC UTILITY (5.202)

In accordance with Section 5.202 of the El Paso County §1041 Regulations, the information in Table 15 describes how Pathway routing and site selection, construction, maintenance, and operation comply with the approval criteria for the Permit Authority approval of the portion of the transmission line subject to this Application. Each criterion for Site Selection and Construction of Major Facilities of a Public Utility from Section 5.202 is listed, followed by a description of how Pathway will comply.

Table 15: Pathway Compliance with Review Criteria for Site Selection and Construction of Major Facilities of a Public Utility (Section 5.202 of the El Paso County §1041 Regulations)

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
5.202.1	All reasonable alternatives to the proposed action, including use of existing rights-of-way and joint use of rights-of-way wherever uses are compatible, have been adequately assessed and the proposed action represents the best interests of the people of this County and presents the best utilization of resources in the impact area.	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. Routing and siting studies were prepared to review and consider reasonable routing and siting alternatives for the new major electrical facilities (pursuant to CRS 29-20-108(4)(a) and (b)). The Segment 5 Routing and Siting Study is included as Attachment C. Public open house meetings were conducted virtually in June 2021 and September 2021 and in El Paso County in November 2021 and March 2022 to inform the public and key stakeholders about Pathway, gather feedback, and address questions and concerns. The analyses of alternatives evaluated in the routing and siting studies and feedback from public and key stakeholders were used to determine the proposed preferred locations for Pathway facilities in El Paso County. 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). The portions of Pathway in El Paso County as described in this Application represent the best interests of the people in the County and the best utilization of resources in the impact area.

Table 15: Pathway Compliance with Review Criteria for Site Selection and Construction of Major Facilities of a Public Utility (Section 5.202 of the El Paso County §1041 Regulations)

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
5.202.2	A satisfactory program to mitigate and minimize adverse impacts has been presented.	Pathway will mitigate and minimize adverse impacts as described in Section 4 of this Application. The monitoring and mitigation plan is provided in Section 2.22.
5.202.3	Reserved.	Noted.
5.202.4	Electric transmission lines and pipelines shall be located so as to discourage traffic congestion, incompatible uses, and expansion of the demand for government services beyond the reasonable capacity of the community or region, and to avoid unreasonable or burdensome expenditure of public resources	Pathway will not require additional local government services beyond those currently provided in the area. Pathway creates no additional demand for transportation infrastructure, educational facilities, housing, water (other than water for construction), wastewater treatment, or public transportation. As described in Section 1.4.h.3, it is anticipated that an average of 30 trucks per day will be utilized during the construction of the transmission line for crews, spotting materials, framing poles, and erecting poles. Concrete truck deliveries will be made daily when the foundations and piers are being constructed. Multiple deliveries of concrete (up to 30 per day) will be required daily at certain stages of construction (see Table 5 in Section 1.4.h.3). Materials will be delivered to the laydown yards at the onset of construction. An additional 10 to 15 trucks will be needed to deliver steel poles, conductor, anchor bolts, and foundation materials daily to work areas. The impact to

Table 15: Pathway Compliance with Review Criteria for Site Selection and Construction of Major Facilities of a Public Utility (Section 5.202 of the El Paso County §1041 Regulations)

Review Criteria Code Citation	Review Criteria	Pathway Compliance with Review Criteria
		local roads will vary day-by-day as construction moves along the route. To mitigate any potential impacts to El Paso County roads, Traffic Control Plans will be prepared and followed during construction. The Transportation Memorandum is provided as Attachment I.
5.202.5	Major facilities of a public utility shall be administered so as to minimize disruption of the service provided by the utility and preserve desirable existing community patterns	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.

6 REFERENCES

APLIC (Avian Power Line Interaction Committee). 2006. Suggested practices for raptor protection on power lines; the State of the Art in 2006. Edison Electric Institute, APLIC and the California Energy Commission Lincoln, D.C and Sacramento, CA.

CNHP (Colorado Natural Heritage Program). 2022. Statewide Elements by 7.5-minute USGS Quadrangle (shapefile). Available online at: https://cnhp.colostate.edu/maps/cnhp-spatial-layers/#element. Accessed January 2023.

Colorado Department of Natural Resources, Colorado Parks and Wildlife and Natural Atlas. 2022. Colorado Trail Explorer. Available online at: https://trails.colorado.gov/. Accessed November 2022.

CPW (Colorado Parks and Wildlife). 2022a. Colorado Fishing Atlas. Available online at: https://ndismaps.nrel.colostate.edu/index.html?app=FishingAtlas. Accessed November 2022.

CPW. 2022b. Colorado Hunting Atlas. Available online at: https://ndismaps.nrel.colostate.edu/index.html?app=HuntingAtlas. Accessed November 2022.

CPW. 2022c. State Wildlife Area Map. Available online at: https://cpw.state.co.us/placestogo/parks/Pages/WildlifeAreaMap.aspx. Accessed November 2022.

CPW. 2022d. Property Finder. Available online at: https://ndismaps.nrel.colostate.edu/index.html?app=propertyfinder&keyword=public&value=Jumping%20Cow%20SWA. Accessed November 2022.

CPW. 2022e. All Species Activity Mapping Data. Updated January 6, 2022. Available online at: https://www.arcgis.com/home/item.html?id=190573c5aba643a0bc058e6f7f0510b7. Accessed January 2023.

CPW. 2022f. Threatened and Endangered Species List. Available online at: https://cpw.state.co.us/learn/Pages/SOC-ThreatenedEndangeredList.aspx. Accessed January 2023.

CPW. 2022g. Species Profiles. Available online at: https://cpw.state.co.us/learn/Pages/SpeciesProfiles.aspx. Accessed January 2023.

CPW. 2021. Colorado Parks and Wildlife Recommendations to Avoid and Minimize Impacts to Wildlife from Land Use Development in Colorado. Available online at: https://cpw.state.co.us/Documents/Conservation-Resources/Energy-Mining/CPW_HPH-Map-Layers.pdf. Accessed January 2023.

CPW. 2020. Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors (2020). Available online at: https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Raptor-Buffer-Guidelines.pdf. Accessed January 2023.

COMap (Colorado Ownership, Management and Protection). 2023. Colorado Ownership, Management and Protection map of protected lands. Latest Version: 02/23/2023. Available online at: https://comap.cnhp.colostate.edu/. Accessed March 2024.

El Paso County. 2023. Appendix B - Guidelines and Regulations for Areas and Activities of State Interest of the El Paso County Colorado Land Development Code. Revised: May 25, 2023. Available online at:https://library.municode.com/co/el_paso_county/codes/land_development_code?nodeId=APXBGUREARACSTIN. Accessed May 2024.

El Paso County. 2022. El Paso County Colorado Community Services Department Parks Master Plan Update 2022. Available online at: https://epc-assets.elpasoco.com/wp-content/uploads/sites/10/Parks_Planning/FINAL-El-Paso-County-Parks-Master-Plan-11-10-22-Final-for-publication.pdf. Accessed November 2023.

El Paso County. 2021. Your El Paso Master Plan. Adopted May 26, 2021. Available online at: https://elpaso.hlplanning.com/pages/documents. Accessed December 2022.

El Paso County. 2016. El Paso County 2016 Major Transportation Corridors Plan Update. Available online at: https://epc-assets.elpasoco.com/wp-content/uploads/sites/13/Documents/2040_Roadway_Plan_Rev10252017.pdf. Accessed May 2024.

EPA (U.S. Environmental Protection Agency). 2022. Current Nonattainment Counties for All Criteria Pollutants. Available online at: https://www3.epa.gov/airquality/greenbook/ancl.html. Accessed November 2022.

Google. 2022. Google Earth Pro Aerial Imagery. Accessed online at: https://earth.google.com/web/. Accessed January 2023.

HIFLD (Homeland Infrastructure Foundation-Level Data). 2022. Electric Power Transmission Lines. Available online at: https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::electric-power-transmission-lines/explore?location=38.995337%2C-87.352132%2C11.99. Accessed December 2022.

NLCD (National Land Cover Database). 2019. National Land Cover Database. Available online at: https://www.mrlc.gov/data?f%5B0%5D=category%3ALand%20Cover&f%5B1%5D=year%3A2019. Accessed January 2023.

PLJV (Playa Lakes Joint Venture). 2019. Playa Lakes Joint Venture Probable Playa Dataset. Available online at: https://pljv.org/playas/playa-tools/. Accessed December 2022.

Pikes Peak Area Council of Governments (PPACG). 2020. Water Quality Management Plan. Available online at: https://www.ppacg.org/water-quality-plan/. Accessed October 2023.

Round River Resource Management (Round River). 2022. Brett Gray Ranch. Available online at: http://roundriver.net/the-brett-gray-ranch/. Accessed December 2022.

Steel Fork Pheasants. 2022. Steel Fork Pheasants. Available online at: https://steelforkpheasants.com/. Accessed December 2022.

USDA (U.S. Department of Agriculture Forest Service). 2022. Colorado Wilderness Information Map. Available online at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3852601.html#. Accessed November 2022.

USFWS (U.S. Fish and Wildlife Service). 2022a. National Wetlands Inventory. Available online at: https://www.fws.gov/program/national-wetlands-inventory. Accessed December 2022.

USFWS. 2022b. USFWS Information for Planning and Conservation (IPaC). Available online at: https://ecos.fws.gov/ipac/. Accessed December 2022.

USFWS. 2022c. Threatened & Endangered Species Active Critical Habitat Report. Available online at: https://ecos.fws.gov/ecp/report/table/critical-habitat.html. Accessed December 2022.

USGS (U.S. Geologic Survey). 2022a. National Hydrography Dataset. Available online at: https://www.usgs.gov/national-hydrography/national-hydrography-dataset. Accessed December 2022.

Xcel Energy. 2021. Our Energy Future: Destination 2030, 2021 Electric Resource Plan and Clean Energy Plan. March 31, 2021. Available online at: https://www.xcelenergy.com/company/rates_and_regulations/resource_plans/clean_energy_plan. Accessed March 2022.