



Kiowa County Permitting Process and Requirements for a Solar PV Project

HB1041 Regulations Chapter 6: Regulations for Site Selection and Construction of Major Facilities of a Public Utility

SUBMISSION REQUIREMENT WAIVER CHECKLIST FOR SOLAR PV GENERATING FACILITIES.

Code Citation		Submission Requirement	WAIVER
(1)		STEP 1: Preliminary Application	
(a)		Application Form	
	(i)	A completed application form	
	(ii)	Description of proposed facility and site	
	(iii)	Description of present use and zoning	
	A	Location Map showing proposed site and clearly indicating the relationship of the site to the surrounding area within 50 miles from site	
	B	Type of facility: - specify where applicable	
		1 approximate floor space of office building	
		2 voltage and length of transmission line	
		3 power source and generating capacity	
		4 function and size of substation	
		5 diameter and length of pipeline	YES
		6 capacity of storage tanks, and type of petroleum derivative to be stored	YES
		7 service area	
		8 resource area (e.g. source of power being generated or transmitted, source of petroleum derivative being transported)	YES
	C	Proposed Development Schedule	
		1 Estimate max number of employees, number of shifts and employees per shift during the following phases: construction. operation and maintenance	
		2 Specify any future phases or extensions of the facility and relationship of the facility to larger programs and plans.	
		3 Specify timetable for planning (e.g. federal permits, state permits, local zoning, etc.)	
		4 Estimate beginning and completion of construction and beginning of operation of facility.	
		5 Describe support facilities (eg pollution control, parking areas, landscaping, etc.) to be provided	
		6 Describe any feasible "non-structural" alternatives to meet the objectives of the proposed site selection and construction	
	D	Hazards and emergency procedures	
		1 describe hazards, if any, of fire, explosion and other dangers to the health, safety and welfare of employees and the general public	
		2 describe hazards, if any, of environmental damage and contamination due to materials used at or activities taking place at the proposed facility.	
		3 Describe emergency procedures to be used in the event of fire, explosion or other event which may endanger the public health. safety and welfare	
		4 Describe any prevalent natural hazards that will affect or be affected by development, and describe mitigating measures to be taken to reduce danger due to such natural hazards	
(2)		STEP 2: Final Application	
(a)		At the time of making final application, all applicants shall submit 5 copies of the following documents and information:	
	(i)	Delineation of Base Area (that area likely to be subject to land use changes as a result of the project)	
	A	Map of Base Area; describe how the determination was made.	
	B	Map of Special Districts (schools, fire, water sanitation, etc.) affected by the proposal.	
	(ii)	Delineation of impact area (that areas whose physical and socio-economic environment is likely to be impacted, beneficially and adversely, by the site selection and construction of the proposed facility)	
	(iii)	Objectives of the proposed site selection and facility	
	A	Describe the relationship of project to local land use policies and comprehensive plans and to policies and plans adopted or under preparation by federal, state and other affected local government agencies.	

		B	Describe the relationship of the project to other existing and planned utility facilities of similar nature, other communication or energy generation and transmission facilities, local government capital improvement and special district expansion programs.	
		(iv)	Description of need for project	
		A	briefly describe why the public convenience and necessity require the facility of the size and nature proposed be constructed on the site proposed.	
		B	sources of demographic and economic data and method of analysis	
		C	market function (ie. What user needs and patterns will project fulfill.)	
		(v)	Description of support facilities needed	
		A	Type of water quality control	
		1	Describe proposed sewage treatment facilities and nonpoint source controls.	
		2	describe pollutant loads (point and non-point sources) expected directly from development. Specify seasonal variations.	
		B	Public services and facilities	
		1	Estimate police and fire protection requirements	
		2	Estimate public road maintenance requirements	
		3	Estimate educational and health services requirements	
		4	Estimate facilities and service required to provide adequate water supply and sewage treatment	
		(vi)	Description of employment and economic opportunities	
		A	Describe Capital Investment in facility	
		B	Estimate anticipated revenues to local, state and federal governments, special districts	
		C	Describe employment opportunities	
		1	Types of jobs and number of positions, wage, salary schedule	
		2	Opportunities for employment of local citizens	
		3	Employment opportunities for low income and minority populations	
		(vii)	Description of visual conditions (base area)	
		A	Map area within view of project	
		B	Map access and travel routes, public areas, residential areas that will have a view of the project	
		(viii)	Description of noise conditions(base area)	
		A	Describe and map possible expected noise levels by immediate and future facility operations	YES
		(ix)	Description of socio-economic environment (impact area)	
		A	Characteristics of the existing population	
		1	Age, income level and distribution, education, social background, family size, etc	
		2	Neighborhood and distinct socio-economic groups	
		3	Migrational trends and seasonal fluctuations	
		4	Anticipated population changes	
		B	Current employment	
		1	Principal employers, type, number of employees	
		2	Unemployment and under employment	
		3	Characteristics of local labor pool	
		4	Manpower training and retraining potential	
		C	Inventory local governments and special districts providing services in base area	
		1	Map jurisdiction and type of service	
		2	Capacity and utilization of services	
		3	Operating revenue and expenditures	
		4	Tax Base	
		5	Current level of taxation	
		6	Estimate revenue generating capacity and identify potential new sources of revenue	
		D	Housing	
		1	Current housing inventory	
		2	Projected housing requirements	
		E	Existing Transportation Network	
		1	Access to site	
		2	Circulation within base area and commuting patterns in impact area	
		3	Capacities of arterial streets within impact area	
		4	Maintenance provisions and costs	
		F	Description of historical and archaeological resources	

			1	Describe historical and archeological sites by means of completing state inventory forms and submit these to the State Historical Society for Evaluation	
			2	Describe resources individually and as the relate to the community, include photos wherever possible	
		(x)		Description of atmospheric conditions (impact area)	YES
		A		Meteorology (based on worst-case winter conditions)	YES
			1	Wind seed and direction	YES
			2	Inversion height	YES
			3	Atmospheric stability	YES
		B		Topography	YES
			1	Describe general and outstanding topographic feature in project area (maps and aerals)	YES
		C		Background ambient air quality (TSP, SO2, HC, CO, Nox, O3, etc.)	YES
	(b)			At the time of final application, applicants seeking a permit for the site selection and construction of transmission lines or substations shall submit, in addition to those requirements set forth in Subsection (a) of this Section, 5 copies of the following documents and information:	
		(i)		Description of geologic and pedologic conditions of base area	
		A		Map of Bedrock and surficial geology	YES
		B		Map and describe areas of:	
			1	Avalanches	YES
			2	Mud flows and debris fans	YES
			3	All types of unstable or potentially unstable slope	YES
			4	Special seismic considerations	YES
			5	Areas of high radioactivity	YES
			6	Ground subsidence	YES
			7	Expansive soil and rock	YES
			8	Other geologic conditions which are pertinent	YES
		C		Map extent of 100-year flood plain if present	
		D		Map topography in adequate detail to determine adequacy of design	
		E		Map and evaluate mineral and energy resources	
		F		Map and evaluate agricultural resources	
		(ii)		Description of biotic conditions (impact area)	
		A		Map plant communities	
			1	Characteristics, quantity, productivity of plant types	
			2	Endangered or threatened plant species	
			3	Evidence of past disturbances and current indications of stages in ecological succession	
		B		Wildlife (terrestrial)	1
			1	Determine species present, seasonal occurrence, status and relative importance	
			2	Map distribution of species	
			3	Map biological features (migration routes, breeding grounds, etc.)	
			4	Identify species included on official federal or state list of endangered or threatened species	
			5	Identify species that are unique in their Colorado distribution	
		C		Wildlife (aquatic)	
			1	Identify species present	
			2	Map streams, lakes and reservoirs which provide or have potential for habitat	
			3	Map biological features (spawning runs, spawning beds, etc.)	
			4	Identify any endangered species (federal or state) or any which are unique in their Colorado distribution.	
	(c)			At the time of final application, applicants seeking a permit for pipelines or storage areas shall submit, in addition to those requirements set forth in subsection (a) and (b) of this Section, 5 copies of the following documents and information:	YES
		(i)		Description of hydrologic conditions - surface (impact area)	YES
		A		Provide map of all surface water	YES
		B		Describe expected monthly streamflows for typical year, wet year, dry year (include 7 day-10 year low flows where sufficient data exists)	YES
		C		Describe physical stream features (vadiant, velocity, depth, etc.)	YES
		D		Provide data on chemical and biological quality, including BOD, dissovod O2, free CO2, PH, TDS, ph-th alkalinity, MO alkalinity, NH4, heavy metals and other toxic or deleterious substances.	YES
		(ii)		Description of hydrologic conditions - subsurface (impact area)	YES
		A		Map all aquifers that may be affected by project	YES

			B	Provide tables, graphs, map showing permeability, transmissibility, thickness, volume, depth of aquifers.	YES
			C	Describe geology of strata overlying aquifers including percolation rates, travel time to groundwater surface.	YES
			D	Map of all wells using aquifers including diameter, flow rates.	YES
	(d)			At the time of final application, applicants seeking a permit for the site selection and construction of a power plant shall submit, in addition to those requirements set forth in subsections (a), (b), and c of this Section, 5 copies of the following documents and information:	
		(i)		map locating and describing resource areas to be utilized as sources of energy	YES
		(ii)		description of water system proposed:	
			A	Source of supply, volume and rate of flow at full development	
			B	Water rights owned or utilized	
			C	Proposed points of diversion and changes of points of diversion	
			D	Volume of stream flow to remain unused between points of diversion	
			E	Dependability of supply (physical and legal)	
			F	Effects on downstream users	
		(iii)		Description of air pollution control measures	
	(e)			At the time of final application, all applicants shall submit an analysis of Impacts as follows:	
		(i)		Summarize the major natural and socio-economic environmental constraints as they affect the site selection and construction of the facility as proposed.	
		(ii)		Describe present utilization of land, water, air, biotic, geologic and socio-economic resources within impact area as applicable to submission requirements.	
		(iii)		describe alternative uses for these resources	
		(iv)		Analyze effects of proposed site selection and construction upon the natural and socio-economic environment of the impact area as applicable to submission requirements.	
			A	Provide analysis of hydrologic, atmospheric, geologic, pedologic, biotic, visual and noise impacts	
			B	Provide surface and subsurface drainage analysis	
			C	Provide socio-economic impact analysis	
			D	Provide transportation impact analysis	
			E	Provide analysis of impacts upon agricultural productivity and ag resources	
		(v)		Analyze long-term effects of the proposed site selection and construction upon the physical and socio-economic development of the impact area	
		(vi)		Justify the proposed site selection and construction against the present and alternative uses of the resources in the impact area	
		(vii)		Describe a program to minimize and mitigate adverse impacts and to maximize the positive impacts of the proposed site selection and construction.	
			A	Analyze alternatives	
			1	Alternative locations and routes	
			2	Alternative types of facilities	
			3	Use of existing rights-of-way	
			4	Joint use of rights of way with other utilities	
			5	Upgrading of existing facilities	
			B	Analyze non-structural alternatives as applicable	
			1	Conservation of energy use	
			2	No development	
			C	Analyze management alternatives (ie development scheduling, training programs, facility design, land trades, etc.)	
			D	Analyze air and water pollution control alternatives	
			E	Analyze design alternatives (access, landscaping, architectural controls)	
			F	Submit a program to meet "front end" costs of providing necessary services and facilities	
	(f)			Other Requirements or Permits prior to Construction	
		1		National Pollutant Discharge Elimination System (NPDES) Permit for storm water management from the CO. Dept. of Health and Environment	
		2		Kiowa County Culvert and Access Permit	
		3		Kiowa County Building Permit	
		4		Kiowa County ROW License for Transmission Lines	