

Saguache County Regulations for Site Selection and Construction of Major Facilities of a Public Utility:

Section 13-304 (1) (c) General Development Feasibility:

Review of Preliminary application:

The preliminary application was submitted to Saguache County on October 9, 2009 and found to be adequate as far as all required materials for preliminary application.

Criteria for Decision

- a.** The health, welfare and safety of the citizens of this County will be protected and served;
 - b.** The natural and socioeconomic environment of this County will be protected and enhanced.
 - c.** All reasonable alternatives to the proposed action, including 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 represents the best interests of the people of this county's resources in the impact area.
 - d.** A satisfactory program to mitigate and minimize adverse impacts has been presented.
 - e.** The nature and location of the facility complies with all applicable provisions of the master plan of this County, and other applicable regional, metropolitan, state, and national plans.
 - f.** The nature and location or expansion of the facility complements the existing and foreseeable needs of the service area and of the area immediately affected by the facility.
 - g.** The nature and location or expansion of the facility does not unduly or unreasonably impact existing community services.
 - h.** The nature and location or expansion of the facility will not create an expansion of the demand for government services beyond the reasonable capacity of the community or region to provide such services, as determined by the Permit Authority.
 - i.** The facility site or expansion area is not in an area with general meteorological and climatological conditions which would unreasonably interfere with or obstruct normal operations and maintenance.
 - j.** The nature and location of the facility or expansion will not adversely affect the water rights of any upstream, downstream, or adjacent communities or other water users;
 - k.** Adequate water supplies are available for facility needs.
 - l.** The nature and location of the facility or expansion will not unduly interfere with any existing easements for or rights-of-way, for other utilities, canals, mineral claims, or roads.
 - m.** The applicant is able to obtain needed easements for drainage, disposal, utilities, access, etc.
 - n.** Adequate electric, gas, telephone, water, sewage, and other utilities exist or shall be developed to service the site.
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- o.** The nature and location for expansion of the facility will not interfere with any significant wildlife habitat or adversely affect any endangered wildlife species, unique natural resource or historic landmark within the impact area.
- p.** The nature and location or expansion of the facility, including expected growth and development related to the operation and provision of service, will not significantly deteriorate air quality in the impact area.
- q.** The geological and topographic features of the site are adequate for all construction, clearing, grading, drainage, vegetation, and other needs of the facility construction or expansion.
- r.** The existing water quality of affected state waters will not be degraded below state and federal standards or established baseline levels.
- s.** The benefits of the proposed developments outweigh the losses of any productivity of agricultural lands as a result of the proposed development.

Review of Major Problems and Concerns:

The proposed project is located southeast of the Town of Saguache in unincorporated Saguache County, Colorado. The general neighborhood of the proposed project is a mix of active agriculture and ranching and rural residential uses. In addition to the criteria above County residents have identified the following concerns through a series of public meetings and written comments:

Noise

Visual Impact

Water Use/Rights

Stormwater/Grading

Irrigation

Transmission/Substations

Agricultural Impacts

Light

Wildlife

Construction Impacts

Roads/Access

Economic/fiscal Impact

Reclamation

Security/safety

Air/Dust pollution

Water/groundwater pollution

Consideration of Alternative Sites

Electromagnetic Energy Impacts

Neighborhood Compatibility/buffering

Discussion:

General:

In addition to all requirements of Saguache County Land Use Code section 13-304(2) the County has comments and concerns described below that must be addressed in the final permit application

The proposed project is a challenging one for the community given the lack of similar projects in the area. At previous meetings, the applicant has offered to arrange a site visit to the Maricopa site for the Board of County Commissioners and staff. The BOCC feel that a site visit would be very valuable to them in attempting to assess the impact of the proposed development on the community. Please arrange site visits for the BOCC and staff to ensure that they have a full understanding of the proposed impact prior to decision. Any arrangements to provide a better understanding for community members would also be helpful.

Noise:

The noise of 8,000 individual motors and a new substation is one of most important issues to area neighbors and appears highly likely to impact existing privacy, rural character and property values without significant mitigation. At the time of final submittal, the applicant is required by code (Sec. 13-304(2)vii to describe and map expected noise levels by immediate and future facility operation. Given the sensitivity to this issue and its potential to change the existing character of the region, the County wishes to supervise the hiring (with funding from Tessera) of an independent firm qualified in sound technology to model and assess the existing conditions and projected noise characteristics of the facility and to propose possible mitigation techniques.

Visual Impact:

Along with noise, the visual impact of the project is an issue identified by area residents as one that will be very difficult to mitigate and will result in a change to the existing character of the area. The final application will require a map of the area within view of the project and a map of access and travel routes, public areas and residential areas that will have a view of the project. Full consideration of Sec. 8.3.3 of the Solar Energy Facilities Guidelines should be provided. Given the large scale nature of the project and the relatively flat topography and open nature of the area, it is likely that the project will be visible from many points within the valley. In addition to mapping delineating the area within view of the project, the applicant will be required to provide visual simulations from neighboring properties and several points identified by the county as critical views. These will include neighboring properties and roads, a night view and several points at higher elevations (foothills, east and west). The analysis should include the proposed Suncatchers, above ground power lines and the proposed substation and service complex in the analysis. Potential and provisions for future reclamation of the site must be considered.

Water Use/Rights:

The preliminary application does a good job of describing the water required for the operation of the proposed project but does not provide any detail on how water will be provided to the site or what water rights are currently available. Given existing use of the property, it is likely that only agricultural water rights currently exist, which are seasonal in nature. These may require a change in use determination. The applicant has provided three possible alternatives for water including on site well/surface water, well/surface water from the Rio Grande River and truck water from an un-named source. The final application must clearly identify the proposed source, document water rights and their dedicated use, and provide details of storage, treatment and disposal required.

Stormwater/Grading:

The proposed project will require re-grading and site disruption of the majority of the 1525 acre parcel. While the preliminary application indicates that many of the natural drainages will be left undisturbed, many of them appear to be disturbed by the placement of the Suncatchers and their associated access roads. The lack of detail on the preliminary site plan makes it virtually impossible to judge impact on stormwater and existing drainage patterns. Proposed site modifications may greatly increase erosion on the site, which may impact properties down stream. The preliminary application states that the majority of the site will remain pervious, except for the building sites, paved areas and Suncatcher foundations. The final application must provide additional detail and clarification of paved vs. unpaved roads. The final application must also provide additional detail regarding stormwater and grading to insure protection of groundwater, surface water, neighboring properties and compliance with State of Colorado stormwater management regulations. A more detailed site plan of at least a portion of the property and consultation with the NRCS and/or the local conservation district will be required. The NRCS and/or the local conservation district will also be helpful in addressing such issues as weeds, dust and revegetation.

Irrigation:

The final application must provide details of existing and proposed irrigation systems. The preliminary application only discusses water requirements for the actual operation of the project (mostly mirror washing and some fire suppression needs) and does not discuss any provision for irrigation for revegetation purposes after construction or dust control needs. The final application should clearly discuss revegetation measures and ongoing needs for irrigation or dust control.

Transmission/Substations:

The final application shall specify the needs for additional transmission and substations. The preliminary application indicates that a substation will be required to be located on the property. Details on the proposed location should be provided at the final application with consideration of alternative locations or proposed mitigation for adjacent landowners.

Agricultural Impacts:

The initial phase of the proposed project will remove 1,525 acres of agricultural lands from production. The final application must demonstrate that the benefits of the proposed development outweigh this loss. In addition, the final application must propose adequate mitigation for the neighboring properties engaged in active agriculture. Possible impacts to consider include weed mitigation, fencing, protection of adjacent organic operations,

and use of pesticides, herbicides and protection from any overspray or offsite drainage among others.

Light:

Light pollution has been identified as a potential change in rural character and disruption to wildlife. The final application must include a lighting plan that meets existing land use code requirements. Any proposed lighting must, at a minimum be dark sky compatible. In addition, the applicant must adequately describe/mitigate the potential for off site glare from mirrors.

Wildlife:

The applicant must clearly describe the potential for impact to existing area wildlife. Proposed security fencing will likely disturb existing migration routes of mammals unless designed with wildlife in mind according to State Division of Wildlife guidelines. Fencing that allows adequate wildlife passage may not be suitable for security purposes. The final application must discuss this concern and make adequate provision for both wildlife and security. The County will require comments from the Colorado Division of Wildlife.

Construction and Maintenance Impacts:

Temporary impacts during construction must be included in the overall analysis of the project. Identified impacts include road impacts, noise and vibration. Consideration must also be given to the temporary construction phase and maintenance phase workforce and whether they will be available locally and trained, or whether they must be housed locally on a temporary basis. If a temporary workforce is anticipated that is not available locally, the impacts of the workforce on schools, social services and local housing must be considered in the analysis.

Roads/Access:

The site is accessed from CR Road T, an existing gravel road. A road impact study must be conducted to analyze the impact on both the County road system and the State Highway system both during construction and operations phases. Consideration must be given to required improvements, proposed mitigations and ongoing increased maintenance needs to the County. The report shall include an estimate of appropriate impact fees.

Economic/fiscal Impact:

The applicants are required to provide an economic impact study of the proposed project at the final application stage. The study must include the impact of construction related activities, workforce impacts, need for impact fees and taxes. Given the importance of this issue to the community and the final decision by the Board, it is recommended that consideration be given to an independent study supervised by the County. Please note that it is the intention of the County to require demonstration of a power purchase agreement prior to final issuance of any permit to ensure actual economic benefit to the community.

Reclamation:

A reclamation plan should be provided that includes both interim reclamation following initial construction and final reclamation after site abandonment. Modifications in drainage in particular should also be addressed in this plan.

Bonds/security:

The final application should include a discussion of the proposed bonding mechanisms proposed to address construction related damages and public improvements and also reclamation.

Security/safety:

A plan should be provided to address security and safety of the site.

Air/Dust pollution:

The Code and Solar Facility Guidelines include detailed requirements to address air quality and dust pollution which should be addressed at the final application stage. The applicant should consider the potential for dust from both construction and disturbed sites after construction.

Groundwater Quality:

The final application should address the potential impact on existing groundwater quality and artesian flows. Issues include sedimentation, safe hazardous material storage in areas of high groundwater and a full analysis of potential impacts on water table and groundwater quality. In order to establish an adequate baseline, a plan should be provided to establish monitoring wells both on and off the property. The report must include impacts from existing alkaline water on proposed pylons. The report should also address the concern expressed by the public concerning pile driving vibrations potentially damaging existing wells and adversely affecting groundwater, and artesian microbiology issues (methanotrophs).

Geotechnical Study:

A geotechnical study should be prepared that provides general geotechnical data with recommendations on foundation, footer and pylon design.

Consideration of Alternative Sites:

Although a discussion of alternative sites has been provided, it is somewhat cursory and does not appear to fully meet the requirement of the regulations. The applicant must provide information as to why this site was selected and what alternative sites were reviewed

Electromagnetic Energy Impacts

The final application shall address the issue of electromagnetic energy levels and potential impacts on humans and animals.

Heat/Climate Change

The final application should include a discussion of any heat that might be generated by the equipment that has the potential to affect the immediate area (both above and below the surface), and addressing atmospheric impacts in inversion conditions.

Function of Equipment

Early informational meetings and background material regarding equipment specifications do not appear to be a match for local climate conditions. Please verify that the equipment will be capable of performing to specifications given local climate conditions.

Neighborhood Compatibility/buffering

The proposal will result in an industrial type use in the middle of a agricultural/rural residential area. While it is often necessary to locate natural resource and utility uses in such areas, this does not negate the need for significant care in mitigating/buffering the existing neighbors. The final application should give thorough consideration of the need for and proposed measures to buffer or mitigate neighboring properties. The buffering/mitigation plan should be provided in sufficient detail to reassure adjacent property owners that any and all adverse effects will be reasonably addressed.