

CUP 2018-05

Conditional Use Summary and Recommendation

Public Body: Tooele County Planning Commission**Meeting Date:** December 5, 2018**Parcel IDs:** Portions of 04-018-E-0035 & 04-018-E-0036**Current Zone:** M-G (Manufacturing General)**Request:** Conditional Use Approval for proposed Solar Energy System**Unincorporated:** Timpie (near U.S. Magnesium)**Planners:** Jeff Miller**Planning Staff Recommendation:** Approval with condition**Applicant Name:** Christine Mikell

PROJECT DESCRIPTION

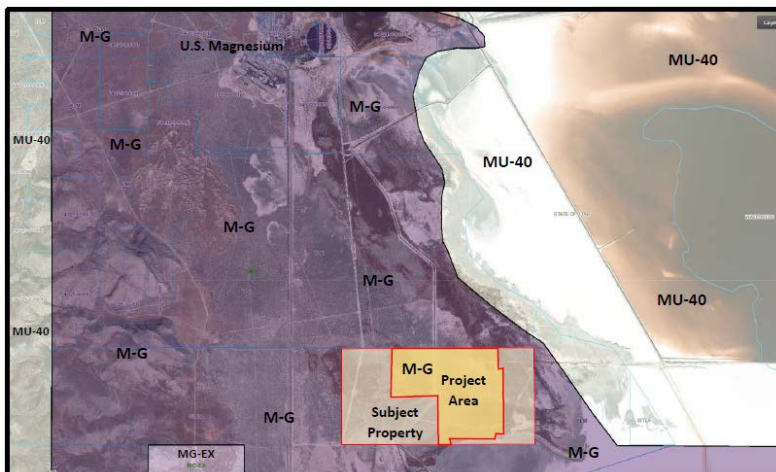
Christine Mikell on behalf of Enyo Renewable Energy is requesting conditional use approval for a proposed Solar Energy System in Timpie (near U.S. Magnesium). The proposed Solar Energy System is known as The Elektron Solar Project and is anticipated to have a generating capacity of up to 80 megawatts.

The subject property is comprised of two parcels with a total combined acreage of 1,280 acres. The proposed Solar Energy System would occupy approximately 518-565 acres.

Solar Energy Systems are a conditional use in the M-G (Manufacturing General) Zone.

***Please see the attached "Elektron Solar Project Overview", which has been provided by the applicant for additional information regarding the proposed project.**

SITE & VICINITY DESCRIPTION (see attached map)



The subject property can be accessed east of Rowley Road in Timpie. The property is located immediately west of the Great Salt Lake. Stansbury Island is located further east. The property is surrounded in all directions by large undeveloped parcels in the M-G (Manufacturing General) zone. There are a few large parcels in the M-G-EX (Mining, Quarry, Sand, and Gravel Excavation) Zone in the general vicinity to the southwest. U.S. Magnesium is located further north along Rowley Road. There is a large area of MU-40 (Multiple Use, 40 Acre Minimum) further to the west and east of the subject property.

LAND USE CONSIDERATIONS (M-G Zone)

Section 17-2-3 of the Tooele County Land Use Ordinance states the following:

In manufacturing zoning districts:

1. *Minimum yard setback requirements shall be established in the conditional use permit or planned unit development approval, except that no commercial building shall be located closer than 50 feet to any residential district boundary line or to any street line which continues as frontage into a residential district, and providing they do not encroach on any easement.*

For areas near property lines for the proposed project, it appears that the applicant has an anticipated setback that ranges between 50-150 feet. According to section 4(b) Solar Energy Systems are exempt from minimum setback requirements.

2. *Buildings and structures shall cover no more than 50% of the lot area except as may otherwise be allowed through planned unit development approval.*

The proposed Solar Energy System is exempt from any restrictions on maximum lot coverage according to section 4(b) below.

3. *Improvements required by the planning commission may include:*
 - a) *Street grading;*
 - b) *Street base;*
 - c) *Curb and gutter;*
 - d) *Sidewalk;*
 - e) *On-site surface drainage facilities;*
 - f) *Culinary water facilities*
 - g) *Wastewater disposal*
 - h) *Street monuments; and*
 - i) *Any other infrastructure deemed necessary.*

Most of these potential improvements would not be appropriate due to the location and nature of the proposed Solar Energy System. The applicant is proposing to install a 7-foot chain-link around the perimeter of their project to prevent the public, livestock, and big game from entering the site and affecting or being adversely affected by electrical infrastructure.

4. *The following provisions apply to Solar Energy Systems:*
 - a) *No above-ground Solar Energy System facility or structure (other than access roads, gates and fences) shall be located closer than 1-mile to any Residential District boundary line (not including Agricultural Zoning Districts) unless otherwise approved by the Zoning Administrator through the site plan review process.*
 - b) *Except as set forth in 4(a) above, no minimum lot size, maximum lot coverage or building height, or other side yard or setback requirements apply to Solar Energy Systems.*
 - c) *No minimum off-street parking or open space requirements apply to Solar Energy Systems.*
 - d) *The installation of sidewalks along the entire property line abutting a public street is not required unless the Zoning Administrator determines that a sidewalk is necessary to serve a public need or the public health, safety and welfare.*
 - e) *Rooftop Mounted Solar Arrays located on industrial buildings in any (M-G and M-D) Zoning District are exempt from the 1-mile buffer requirement.*

The proposed Solar Energy System is not within 1-mile to any Residential District boundary line. Sidewalks would not be necessary for the proposed Solar Energy System at this location.

GENERAL PLAN CONSIDERATIONS

The Tooele County General Plan Update 2016 identifies the area where this proposed use is located as an appropriate location for manufacturing/industrial purposes. The proposed Solar Energy System is suitable for this location.

ISSUES OF CONCERN/PROPOSED MITIGATION

Planning Staff has not identified any issues of concern with the proposed Solar Energy System.

NEIGHBORHOOD RESPONSE

Planning Staff has not received any comments from the general public regarding the proposed Solar Energy System as of the completion of this report. Any comments that are received will be presented to the Planning Commission on December 5, 2018.

REVIEWING AGENCIES RESPONSE

Compliance with current building, construction, engineering, fire, health, landscape and safety standards will be verified prior to final approval and the issuance of any related building permits.

PLANNING STAFF ANALYSIS

Planning Staff has reviewed the proposed conditional uses and has found that it is cohesive with surrounding uses, the Tooele County General Plan Update 2016, and the Tooele County Land Use Ordinance.

Section 2-2 defines "Solar Energy System" as the following:

"Solar Energy System" means a facility that collects and converts sunlight into electricity, whether by photovoltaics, concentrating solar thermal devices, or other solar technologies, and transmits such electricity to off-site users, together with all accessory uses and facilities incidental thereto, including, without limitation, generators; electrical transmission and distribution lines and facilities (including transmission lines with a capacity of 50KV or greater); communication lines, cables, conduits, and facilities; electric transformers, substations, and interconnection facilities; energy storage facilities; telecommunications equipment; control buildings and maintenance yards; access roads, fences and gates.

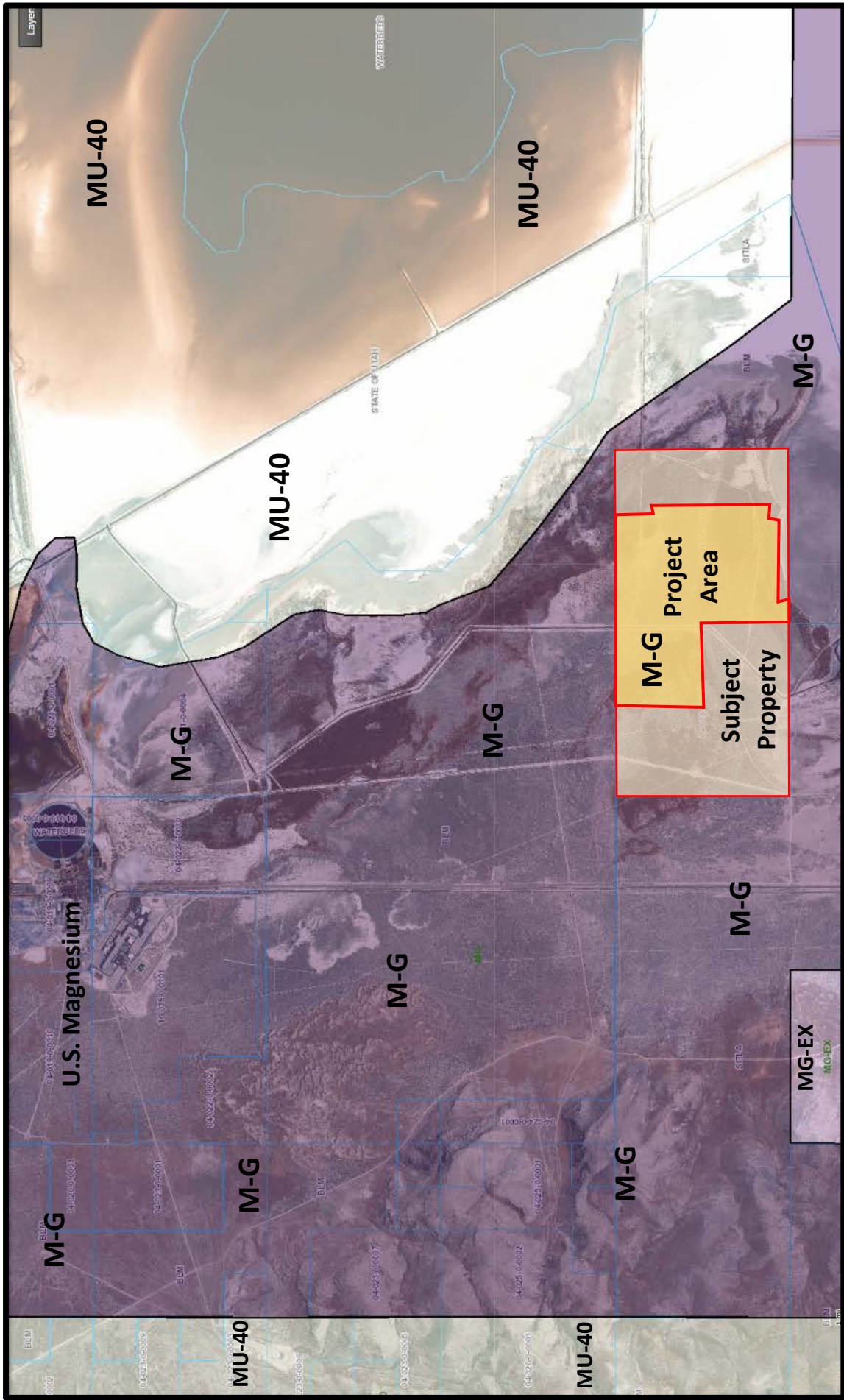
PLANNING STAFF RECOMMENDATION

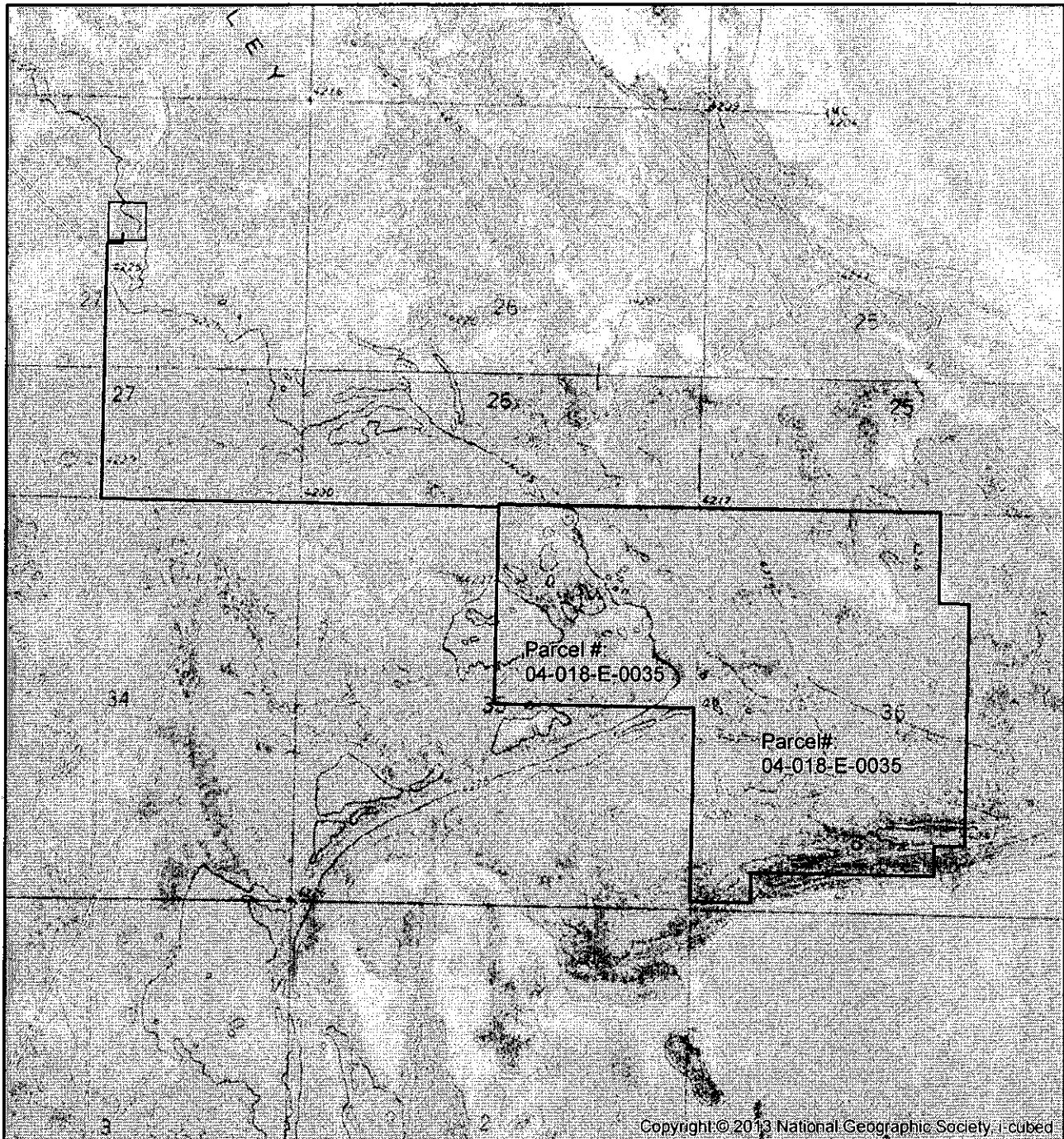
Staff recommends that the Tooele County Planning Commission makes a motion to grant approval for the proposed conditional use, subject to the following condition of approval:

1. If the requested ordinance amendment proposed by Enyo Renewable Energy regarding the expiration dates for conditional use permits for approved Solar Energy Systems is adopted by the Tooele County Commission, this amendment will be applicable to this Solar Energy System.

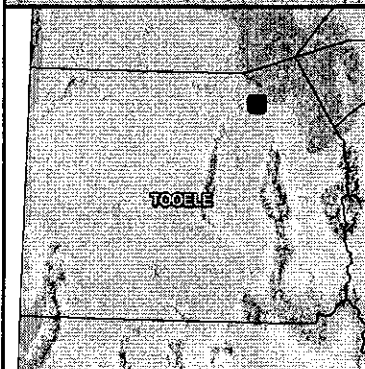
CUP 2018-05: Conditional Use Approval for Proposed Solar Energy System

Unaddressed Parcels (Parcel ID: Portions of 04-018-E-0035 & 04-018-E-0036)





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- Parcel Line
- Proposed Transmission Route
- Project Area
- Existing Substation Property
- Proposed Transmission Line Easement

Miles
0 0.25 0.5



Elektron Solar

Project Location

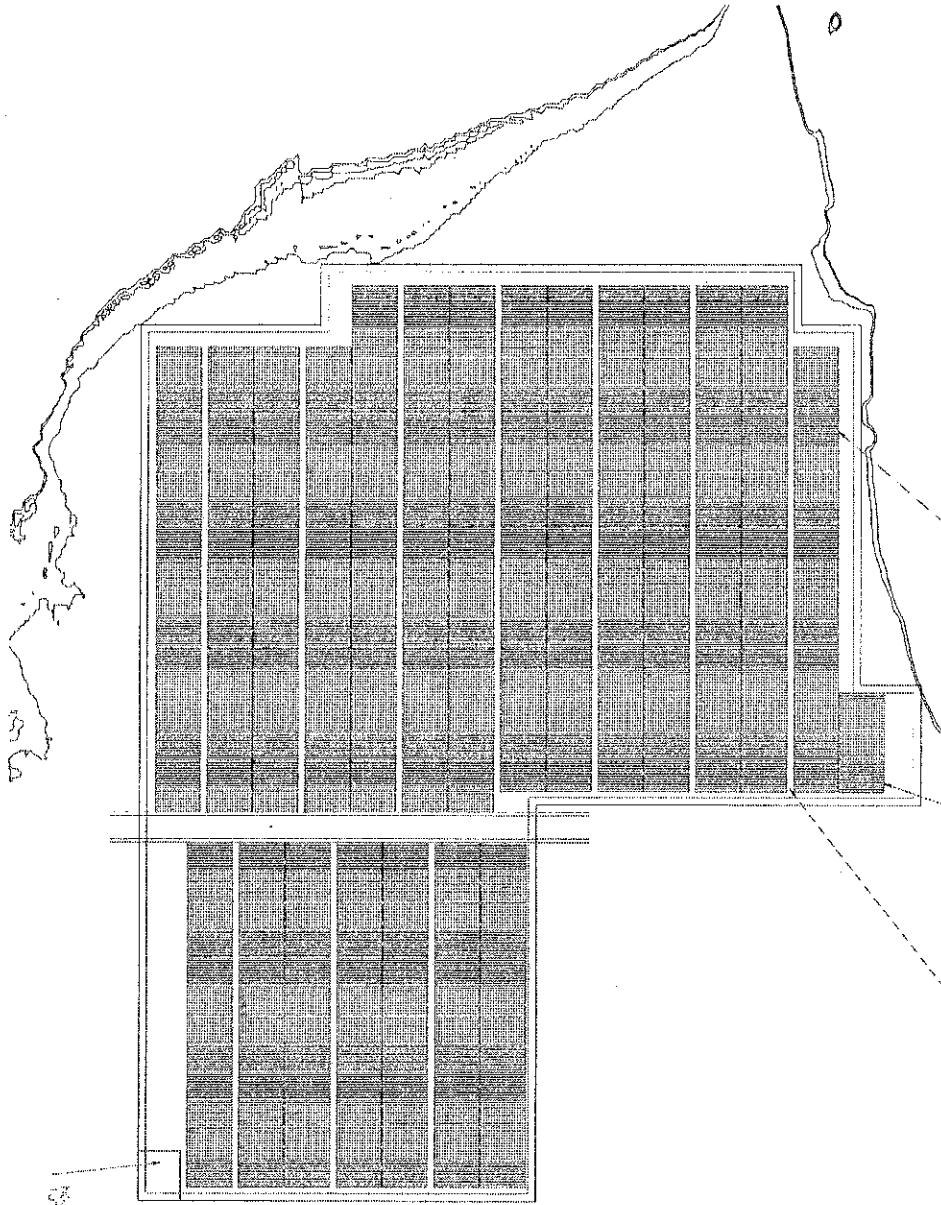


ELEKTRON

40.86 N 112.695 W

Revision	Date	Description	By	App
1	12/27/11	FOR 2012		

PROJECT INFORMATION	
SYSTEM SIZE (DC)	170,215 kW
SYSTEM SIZE (AC)	81,970 kW
SYSTEM TYPE	SINGLE AXIS TRACKER W/ 18% EFF NEXTTRACKER OR ECCV
MODULES	319-45A TRINA 345W MODULES OR EQUIV
INVERTERS	(27) SOLARELECTRONICS FS2600CH15 W/ 3110 KVA RATING



LEGEND:

INTERCONNECTING DC	
CABLE	
INTERCONNECTING AC	
CABLE	
CONCRETE BOX	
SYSTEM BOUNDARY	
STANDARD BOX	
CONCRETE BOX	
BOUNDARY	



REV A

ENYO
E-101

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ELECTRICAL SITE PLAN
Drawn By: AM
Checked By: SW
Date: 12/20/11
Project Number: 120001
Revision: 1

Elektron Solar Project Overview

The Elektron Solar Project ("Project") is a proposed utility-scale "Solar Energy System" (as defined in the Tooele County Land Use Ordinance) with a generating capacity of up to 80 megawatts. The Project site comprises approximately 565 acres of largely undeveloped land and is located on the southwestern shore of Great Salt Lake on property owned by the Utah School and Institutional Trust Lands Administration (SITLA) and the Bureau of Land Management (see attached Project Location map). It is approximately 1 mile east of Rowley Road, 7 miles north of Interstate-80 (I-80) and 3 miles south of the U.S. Magnesium Plant. The Project site occupies portions of Sections 35 and 36, Township 2 North, Range 8 West, Salt Lake Base and Meridian (see attached Project Location Map). The Solar Energy System may consist of any of the following facilities and uses: photovoltaic solar panels and all accessory uses and facilities incidental thereto; electrical collection lines and facilities (including transmission lines with a capacity of 50 KV or greater); communication lines, cables, conduits, and facilities; electrical transformers, substations, and interconnection facilities; energy storage facilities; telecommunications equipment; control buildings and maintenance yards; access roads, fences and gates. The Project's transmission line would extend westward from the Project site along the northern boundary of Sections 35 and 34, then run northward along Rowley Road to a point of interconnection at the Craner Flat Substation in Section 27. Section 27 is federal land managed by the U.S. Department of Interior, Bureau of Land Management (BLM), Salt Lake Field Office. The BLM has issued a right-of-way grant for the transmission line.

The Project site is situated within the Poverty Point Area on a site zoned for general manufacturing uses (M-G). Solar Energy Systems are conditional uses within the M-G zone. There are no towns or substantial settlements near the Project site. Grantsville, approximately 30 miles southeast of the site via surface roads, is the closest population center. Grantsville, like most development in the county, is located in Tooele Valley on the east side of the Stansbury Mountains and out of sight from the Project. A canal that conveys brine to U.S. Magnesium bisects the Project site from south to north. There are several natural gas pipelines in the vicinity of the Project site, two along Rowley Road and one that runs diagonally across Section 35 just west of the Project site. Currently, the primary land use within the Project site is rangeland and wildlife habitat.

Conditional Use Permit Application

The following section provides responses to questions II.a through II.c in the Tooele County Conditional Use Permit Application.

II.a. How does your proposed project fit in with the surrounding properties and uses?

The Project site falls within the Poverty Point general manufacturing (M-G) zone. Solar Energy Systems are conditional uses within the M-G zone. It is consistent with other industrial uses in the vicinity including a magnesium processing facility, salt processing facility, utility lines, railroad corridor and I-80.

II.b. In what ways does the project not fit in with surrounding properties and uses?

The industrial use associated with the Project would be different from the mostly undeveloped land that currently characterizes the Project site and surrounding area. There would be a change in the visual character of the area with introduction of solar panels and associated facilities. However, the Project

represents a relatively small portion of the undeveloped land in the area and would have no impact on surrounding properties and land uses.

II.c. What will you do to mitigate the potential conflicts with surrounding properties and uses, if any exist?

Because the Project would have no effect on surrounding properties and land uses, no mitigation is proposed or required. The photovoltaic panels and related facilities, including the Project substation, would be fenced to protect public health and safety and minimize potential for theft and vandalism of the Project's facilities.

Compliance with Tooele County Land Use Ordinance – Chapter 7

The table below summarizes how the Project would comply with the requirements and conditions listed in Section 7 – 5(2) of the Tooele County Land Use Ordinance.

Elektron Solar Project Compliance with Tooele County Land Use Ordinance Section 7 – 5 (2)	
Requirement/Condition	Compliance
(a) Public health, safety, comfort, order, and general welfare	The proposed utility-scale solar energy project would have no direct effects on public health, safety, comfort, order, and general welfare. By reducing reliance on energy generated through the combustion of fossil fuels, which is known to adversely affect air and water quality, the Project would have indirect benefits to public health, safety, and welfare.
(b)(i) The use will comply with the intent, spirit, and regulations of the Tooele County Land Use Ordinance and zoning district where the use is to be located	The Project is planned for an industrial zone (general manufacturing zone M-G) and would therefore comply with the Tooele County Land Use Ordinance and zoning district where the use would be located. Solar Energy Systems are conditional uses within the M-G zone.
(b)(ii) The use will be harmonious with the neighboring uses in the zoning district	The proposed use would be harmonious with other industrial uses, such as the U.S. Magnesium Plant and Cargill Salt Plant, located in the vicinity of the Project area.
(c) The site size, dimensions, location, topography, and access are adequate for the needs of the proposed use	The size of the Project site is adequate to accommodate the proposed use.
(d) All required public facilities have adequate capacity to serve the proposal	Existing public facilities including the main access road (Rowley Road), fire and police services are expected to be adequate to serve the Project.
(e) Limiting the hours, days, place and/or manner of operation	The Project would not be open to the public. It would operate throughout the daylight hours with maintenance activities (when needed) typically occurring at night when the solar panels are not operating.

Elektron Solar Project Compliance with Tooele County Land Use Ordinance Section 7 – 5 (2)	
Requirement/Condition	Compliance
(f) Requiring site or architectural design features which minimize environmental impacts such as noise, vibration, exhaust/emissions, glare, erosion, odor, and/or dust	The electrical site plan that has been developed for the Project (attached) has been designed to avoid or minimize environmental impacts. Impacts related to noise, vibration, exhaust/emissions, and dust would be largely limited to the construction period and would thus be short-term and temporary. The Project would use photovoltaic solar panels that track the movement of the sun. Consequently, glare impacts would be minimal. The Project would not generate any odors. The creation of fugitive dust would be avoided or minimized during construction through the use of water trucks. Dust generated during operations and maintenance would be minimized by ensuring that project vehicles adhere to posted speed limits.
(g) Requiring larger setback areas, lot area, and/or lot depth or width	The project setbacks conform with the Tooele County Land Use Ordinance.
(h) Limiting the building height, size or lot coverage, and/or location on the site	The proposed photovoltaic solar panels are not expected to exceed approximately 10 feet in height at maximum tilt (60 degrees). Project substation facilities are expected to be under 50 feet in height and transmission line towers are expected to be approximately 60 feet tall, though taller towers (up to 100 feet) may be needed at road crossings or crossings of other power lines.
(i) Designating the size, number, location, and/or design of vehicle access points or parking areas	Vehicle access points to the Project site will be identified during final design. There will be no public parking on the site and parking for operations and maintenance (O&M) vehicles will be minimal and limited to those needed to accommodate O&M personnel.
(j) Requiring street right-of-way to be dedicated and street(s), sidewalks, curbs, planting strips, pathways, or trails to be improved	Not applicable (N/A) to the Project.
(k) Requiring landscaping, screening, drainage, water quality facilities, and/or improvement of parking and loading areas	N/A
(l) Limiting the number, size, location, height, and/or lighting of signs	N/A: no signage is anticipated along Rowley Road. Interior signage required for O&M activities would be small and unobtrusive.
(m) Limiting or setting standards for the location, design, and/or intensity of outdoor lighting	Outdoor lighting would be fully shielded to minimize light pollution and would only be lit when needed for night-time O&M activities.

Elektron Solar Project Compliance with Tooele County Land Use Ordinance Section 7 – 5 (2)	
Requirement/Condition	Compliance
(n) Requiring berms, screening or landscaping and the establishment of standards for their installation and maintenance	N/A
(o) Requiring and designating the size, height, location and/or materials for fences	The Project's facilities would be surrounded by a 7-foot-high chain-link fence to prevent the public, livestock, and big game (e.g., pronghorn, mule deer) from entering the site and affecting or being adversely affected by electrical infrastructure.
(p) Encouraging the protection and preservation of natural features including existing trees, soils, vegetation, watercourses, habitat areas, drainage areas, historic resources, slopes, cultural resources, and/or sensitive lands	There are no trees on the Project site. Vegetation is largely limited to cheatgrass and salt-tolerant shrubs such as greasewood and shadscale. There are no sensitive lands on the Project site. Shrubs located under the proposed solar arrays would be cleared with their roots left intact to minimize soil compaction and/or loss. The site is predominately flat, thus the need for site grading would be limited. Best management practices (BMPs) would be employed to minimize potential for erosion during construction and operation of the project. The electrical site plan has been designed to avoid impacts to the existing brine canals on the site. No wetlands or other Waters of the U.S. would be affected by the proposed project. Three cultural resource sites have been documented near the project site. All three of these are historic roads and none are considered eligible for listing on the National Register of Historic Places. Moreover, project development would not be expected to result in any substantive impacts to these resources.
(q) Requiring the protection and preservation of groundwater recharge areas	The Project site is not located within a groundwater recharge zone.
(r) Limiting noise generation	Noise generation would be limited to project construction and periodic maintenance activities and would therefore be temporary and short-term in nature. Noise generated during project operations would be negligible.
(s) Minimizing environmental impacts to identified wetlands, wildlife habitat, air and water quality, cultural resources, and scenic qualities	As noted above, no wetlands or other waters of the U.S. would be affected by project development. There would be an incremental decrease in wildlife habitat but, given the relative lack of wildlife use of greasewood, shadscale, and cheatgrass habitats and the prevalence of these habitats in the surrounding area, impacts to wildlife habitat are expected to be minimal.

Elektron Solar Project Compliance with Tooele County Land Use Ordinance Section 7 – 5 (2)	
Requirement/Condition	Compliance
	Should Project construction take place during the avian breeding season, potential impacts to migratory birds would be minimized by conducting nest clearance surveys and avoiding disturbance of active nests. Impacts to air quality due to the generation of fugitive dust would be minimized by implementing a fugitive dust abatement plan including the use of water trucks or other soil stabilizers during construction. As described above, impacts to cultural resources would be negligible. Scenic quality in the Project area is generally low and already impacted by adjacent land uses such as the U.S. Magnesium Plant, Cargill Salt and associated impoundments, and the Wasatch Regional Landfill. The relatively low stature of the proposed solar arrays would not affect background views of Stansbury Island or the Lakeside Mountains.
(t) Turn-lane improvements at street intersections	Given the limited traffic on this portion of Rowley Road, the need for turning-lane improvements along Rowley Road is not anticipated.
(u) Providing for emergency response access	Emergency response access, including gate combinations, will be provided to local police and fire departments to ensure prompt access to the site in case of emergencies.
(v) Requiring pedestrian, bicycle, and transit circulation, including related facilities, as needed among buildings and related uses on the development site, as well as to adjacent and nearby residential areas, transit stops, neighborhood activity centers, office parks, and industrial parks	N/A
(w) The conditions shall be in compliance with the general plan of Tooele County	As noted above, the Project would be constructed and operated in compliance with the Tooele County General Plan.