

PUBLIC HEARING

APP. NUMBER/OWNER/DESCRIPTION OF REQUEST

UC-25-0502-COUNTY OF CLARK (ADMINISTRATIVE):

USE PERMITS for the following: **1)** large-scale electric generation (solar); and **2)** public utility structures (Battery Energy Storage System (BESS) facility and utility poles) and all ancillary structures.

WAIVERS OF DEVELOPMENT STANDARDS for the following: **1)** increase structure height; **2)** eliminate street landscaping; **3)** eliminate buffering and screening; and **4)** allow high activity areas (drive aisles) adjacent to a less intense residential district.

DESIGN REVIEWS for the following: **1)** a large scale, solar electric generation facility; **2)** public utility structures and all ancillary equipment; and **3)** final grading plans for a hillside development on 1,352.46 acre portion of a 2,789.36 acre site in an RS80 (Residential Single-Family 80) Zone and an IP (Industrial Park) Zone.

Generally located northwest of Needles Highway and north of Laughlin Boulevard (alignment) within Laughlin. MN/rg/cv (For possible action)

RELATED INFORMATION:

APN:

265-00-001-010; 265-00-001-012 through 265-00-001-014; 266-00-001-001; 266-00-001-009

WAIVERS OF DEVELOPMENT STANDARDS:

1. Increase the height of public utility structures to 199 feet where 35 feet is the maximum height permitted per Section 30.02.02B (a 469% increase).
2. Eliminate street landscaping along an unnamed public street along the east side of APNs 265-00-001-012 and 265-00-001-013 where 6 foot wide landscape strip is required per Section 30.04.01D.
3. Eliminate buffering and screening requirements where required per Section 30.04.02.
4. Allow high activity areas (drive aisles) adjacent to a less intense residential district where not permitted per Section 30.04.06G.

LAND USE PLAN:

LAUGHLIN - BUSINESS EMPLOYMENT

LAUGHLIN - OPEN LANDS

BACKGROUND:

Project Description

General Summary

- Site Address: N/A
- Site Acreage: 1,352.46 (site)/2,789.36 (overall)

- Project Type: Solar electric generation facility with BESS facility, public utility structure, and overhead transmission lines
- Building Height (feet): 199 (maximum)
- Sustainability Required/Provided: 7/7

Site Plan

The plan depicts a proposed solar photovoltaic electric generation facility with accessory substation, BESS facility, and public utility structures located northwest of Needles Highway between the Nevada state line and Casino Drive. The plans show the 2,789.36 acre site is designated as Phase 2A. This phase will be dedicated to the solar photovoltaic (PV) electric generation facility and its panels and accessory structures with an area comprising 30.56 acres on APNs 266-00-001-001, 265-00-001-012, 265-00-001-010, 266-00-001-009, 265-00-001-013, and 265-00-001-014. APN 265-00-001-014 will serve as an access point for this phase of the project from Needles Highway. Phase 2A will be separate from the larger future Phase 1 area that will be permitted with UC-25-0499.

The subject solar electric generation facility is bounded by Needles Highway to the east and APNs 266-00-001-002 and 266-00-001-008. The facility is primarily situated in the northern part of Phase 2A, with the exception of an area in the northwest corner of the site that belongs to Phase 1. These panel areas generally consist of long rows of panels with collector invertors on raised pads at regular intervals and are generally sited independent of each other. The site is broken into these panel areas to avoid existing utility line easements and areas of significant slope between the eastern panel blocks. The locations of the individual panel blocks avoid areas of significant slopes as much as possible, but some areas of significant slope are proposed to be graded. Each of the larger panel blocks will be enclosed by a 7 foot tall security fence with a 16 foot wide paved road connecting each independent panel block. A waiver has been requested to allow the proposed 16 foot wide road be located within 50 feet of residential adjacency on the west side of APN 266-00-001-001. The plans also show the panel structures will be set back at least 60 feet from the western boundary and fence line. Additionally, the panels will be 1,054 feet from the eastern boundary of the proposed 50 foot wide dedication proposed along the eastern boundary.

Each panel area consists of an internal network of 16 foot wide paved access roads that generally run east to west and are spaced at regular intervals throughout the panel areas. North-South drives are located at the end of each panel area to connect the east-west roads. Turnarounds are dispersed throughout the site to facilitate circulation and rock causeways are placed in areas where existing washes are located. Access to these internal drives is provided by 2 main access roads that will be paved and are 20 feet wide. The access road is located approximately 1.5 miles north of Laughlin Boulevard and runs 4,126 feet from Needles Highway to the northwest to the western of the boundary of the site before turning north along the west boundary and then running northeast to the north-central boundary of the site. This access road generally runs along an existing unpaved access road and will primarily access the panel blocks associated with the subject site.

The BESS facility, and substation are shown located on the northern edge of the Phase 2A area boundary. The BESS facility is set back 246 feet from the northern boundary of the site and the

substation area is located southeast of Phase 1 area substation. The plans for both the BESS facility and substation show the equipment will generally be located centrally within the pad sites with power line tower (dead-end structure). The BESS area will be enclosed by a 9 foot tall security fence and gated with a 20 foot wide security gate. Both the BESS facility and substation will have a single point of access, each located in the southeast and southwest corners of their respective areas. These access points will connect to a 24 foot wide drive aisle that will connect with the northern main access road to the southwest substation and BESS areas.

The BESS facility consists 2 sections with 7 rows of coupled battery enclosures and inverters with an inverter/transformers unit associated with 2 quadruple battery enclosure units either to the west or east of the row. The eastern portion of the 2 BESS facilities will consist of 1 row of 12 battery and transformer units and the western portions will consist of 2 blocks of 2 rows of battery and transformer units. The entire BESS facility will be enclosed by a 9 foot high security fence. There will be 24 foot wide paved drive aisles that encircle all 4 blocks and will have each 1 point of gated access. One point of access will be located in the mid-section of the BESS facility and will directly access the main access road. The second point of access is in the northwest corner of the BESS facility.

Finally, the grading plans show that a total area of 189 acres will be graded with a total area of 32.1 acres being within a slope exceeding 12%. Nearly all the areas within significant slope areas to be graded on different portions of the site within the solar electric generating facility panel block areas. These high slope areas are shown to be clustered in the central and southern portions of the phase 2 boundary area along with more isolated patches of high slope areas in the northeast panel block and the northern and central sections of the western panel block. Of the 32.1 acres of area with a slope 12% or greater being graded, 31.7 acres will have a slope of 12% to 25% and 0.4 acres will have a slope of greater than 25%. This means 17% of the graded area will have slopes between 12% and 25% and 2.3% of the project site with a slope of 12% to 25% will be disturbed with 97.7% maintaining natural grade. Additionally, 2.3% of the graded area will have slopes greater than 25% and 0.02% of the project site with a slope greater than 25% will be disturbed with 99.98% maintaining natural grade.

Landscaping

The plans show that there is no proposed landscaping besides the natural landscaping that will remain on-site. Street landscaping is not being provided along a proposed 50 foot wide unnamed half-street section along the east side of APNs 265-00-001-012 and 26-00-001-013. Along the unnamed street dedication, a total of 112 trees are required. Buffering and screening landscaping is required along the northern and western boundaries of the site but is also not being provided.

Elevations

Within the electrical substation, various steel pole towers will be used with the tallest structure being 199 feet. The elevations show each inverter enclosure will consist of a painted metal exterior with latched doors on 1 side and with a maximum height of 8 feet. The proposed PV panels are shown to also be painted metal with a maximum height of 20 feet when at a maximum 45 to 60 degree angle. Each individual BESS battery unit enclosure will consist of a painted metal exterior with latched doors on 1 side. The battery enclosures will generally be 9.5 feet tall, 30.5 feet long, and 5.7 feet wide.

Applicant's Justification

The reduction in separation to residential uses for the electric generation facility and the waiving of residential adjacency standards is justified as the area surrounding the subject site is rural open lands and should not be any residential development that would be negatively affected by the proposed project. Additionally, the elimination of screening and buffering and street landscaping is justified as landscaping is not typical of rural PV projects and associated transmission lines. Additionally, landscaping would require the use of scarce water resources. The increase in height should not cause any negative impacts, as the area surrounding the project site is largely surrounded by undeveloped open lands and there are no adjacent land uses that would be negatively impacted by the requested height waiver.

Prior Land Use Requests

Application Number	Request	Action	Date
UC-22-0615	Final grading plans for a solar electric generating station - expired	Approved by BCC	December 2022
UC-21-0753	Solar electric generating station with public utility structures, overhead transmission lines, substations, and all ancillary structures with hillside development review - expired	Approved by BCC	February 2022
UC-0385-11	Solar electric generating station with public utility structures and all ancillary structures - expired	Approved by BCC	October 2011

Surrounding Land Use

	Planned Land Use Category	Zoning District (Overlay)	Existing Land Use
North, West, & South	Open Lands	RS80	Undeveloped
East	Outlying Neighborhood (up to 0.5 du/ac)	IP	Undeveloped

Related Applications

Application Number	Request
UC-25-0497	A use permit for overhead transmission lines, public utility structures, electric substation, and ancillary structures including a communication tower is a related item on this agenda. This application is a duplicate of UC-25-0501.
UC-25-0499	A use permit for a solar generation station with a BESS facility, public utility structures, and ancillary structures including a communication tower is a related item on this agenda.
UC-25-0501	A use permit for overhead transmission lines, public utility structures, electric substation, and ancillary structures including a communication tower is a related item on this agenda. This application is a duplicate of UC-25-0497.

STANDARDS FOR APPROVAL:

The applicant shall demonstrate that the proposed request is consistent with the Master Plan and is in compliance with Title 30.

Analysis

Comprehensive Planning

Use Permits

A special use permit is considered on a case by case basis in consideration of the standards for approval. Additionally, the use shall not result in a substantial or undue adverse effect on adjacent properties, character of the neighborhood, traffic conditions, parking, public improvements, public sites or right-of-way, or other matters affecting the public health, safety, and general welfare; and will be adequately served by public improvements, facilities, and services, and will not impose an undue burden.

Overall, staff finds there is a history of electric generation facilities, transmission lines, and similar uses being approved on both the subject site and the surrounding area. Given the overall visual impacts that such facilities cause, staff finds to reduce impacts on the rural character of the area it is best to concentrate these types of structures in certain areas, such as the subject site, where there is little urban or residential development located in the surrounding area and where such facilities can be clustered to prevent future impacts. The proposed public utility structures through both height and the painting of the proposed structures with a neutral color. The tower will also be significantly set back from exterior property lines and residential developments. Given the addition of the proposed solar photovoltaic electric generation facility, substation, and other public utility structures advances Master Plan Policies 3.2.1 and 3.2.2, which encourage the development of renewable energy and related distribution facilities, staff can support these requests. To address matters related to impacts caused by the project, a development agreement is requested to mitigate potential impacts.

Waivers of Development Standards

The applicant shall have the burden of proof to establish that the proposed request is appropriate for its proposed location by showing the following: 1) the use(s) of the area adjacent to the subject property will not be affected in a substantially adverse manner; 2) the proposal will not materially affect the health and safety of persons residing in, working in, or visiting the immediate vicinity, and will not be materially detrimental to the public welfare; and 3) the proposal will be adequately served by, and will not create an undue burden on, any public improvements, facilities, or services.

Waiver of Development Standards #1

When it comes to the height of public utility structures, the proposed utility structures come in a variety of shapes and heights but are like structures that have been previously approved in the area. Staff finds the number of additional towers and their heights should not create any undue burdens in the area given that such towers have previously been approved and the scale of the towers in relation to the site should not increase any visual burden. In addition, the nearest residential use is several miles away to the northeast and would not be affected by the additional height of the towers. For these reasons, staff can support this request.

Waiver of Development Standards #2

Given the rural nature of the site and the fact that this site will be virtually unmanned, staff sees no issue with regard to the lack of street landscaping. Due to the rural nature of the site, the lack of pedestrians in the area, and the generally low heat vulnerability of the area due to natural vegetation at the site, such street landscaping would not serve much purpose. In addition, while staff typically prefers some landscaping be present, staff finds added landscaping would be out of place and natural landscaping would be a preferable choice for the area. In addition, the lack of landscaping is typical of similar projects. For these reasons, staff can support this request.

Waivers of Development Standards #3 & #4

Given the rural nature of the surrounding area and the history of approval of similar public utility developments in the surrounding area, staff finds it unlikely there will be much residential development in the surrounding area. Additionally, the nearest residential use is several miles away. The surrounding area has generally maintained its rural desert landscaping and character, so the placement of a screening buffer would be out of place for the area. Additionally, given the limited development of the surrounding area and the setback of the proposed drive aisles, the lack of a buffer and the placement of the drive aisles should not have any negative impacts. As a result, given the lack of residential development and the difficulty that maintaining non-native desert landscaping would be for this area, staff can support these requests.

Design Reviews

Development of the subject property is reviewed to determine if 1) it is compatible with adjacent development and is harmonious and compatible with development in the area; 2) the elevations, design characteristics and others architectural and aesthetic features are not unsightly or undesirable in appearance; and 3) site access and circulation do not negatively impact adjacent roadways or neighborhood traffic.

Design Reviews #1 & #2

Overall, staff finds that the design of the proposed solar electric generation facility, substation, utility towers, BESS facility, and communication tower are like those previously approved in the area. The proposed structures properly account for existing topographical features and are integrated into the proposed solar generation facilities. The proposed facilities are concentrated in areas where solar electric generation facilities have been approved previously, far from any existing residential uses. In addition, the facility has mitigated possible visual effects by locating within an area that is trending toward the development of solar generation facilities and other renewable energy and electrical substation projects. For these reasons and the fact that the design of the site accounts for the surrounding area as much as possible, staff can support these requests.

Design Review #3

The purpose of the hillside development restrictions is to provide for the reasonable, safe and aesthetic use of the steep and inconsistent topography of natural hillsides within unincorporated Clark County. The site is in areas with slopes exceeding 12%. The final grading plan will allow the applicant to propose construction of a new solar electric generation facility with associated public utility structures. Staff finds the grading and site design will help to reduce any visual impacts by generally maintaining the existing topography of the area and will integrate the structures into the existing topography as much as possible. The overall disturbance of the

hillside is limited and will maintain the natural character of the area. Additionally, the grading design limits the number of retaining walls and their height. The proposed hillside development design will support Master Plan Policy 6.2.1, which supports development that is context specific and maintains the integrity of both the natural and built environment. For these reasons, staff can support this request.

Staff Recommendation

Approval.

If this request is approved, the Board and/or Commission finds that the application is consistent with the standards and purpose enumerated in the Master Plan, Title 30, and/or the Nevada Revised Statutes.

PRELIMINARY STAFF CONDITIONS:

Comprehensive Planning

- Prior to the issuance of building and grading permits, or subdivision mapping, mitigate the impacts of the project including, but not limited to, issues identified by the technical reports and studies, and issues identified by the Board of County Commissioners or commit to mitigating the impacts of the project by entering into a Development Agreement with Clark County;
- Prior to the issuance of building and grading permits, enter into a Performance Agreement with Clark County or provide evidence of an agreement with the Bureau of Land Management which includes a Decommissioning Plan specifying the actions to be taken by the Developer or County in the event construction or use of the project is stopped or abandoned;
- Bond or other form of financial security, acceptable to Clark County or the Bureau of Land Management, shall be provided with the Performance Agreement as security of the full and complete fulfillment of the decommissioning actions identified in the Decommissioning Plan;
- Certificate of Occupancy and/or business license shall not be issued without approval of a Certificate of Compliance and a tree fee-in-lieu will be required for any required tree waived.
- Applicant is advised a bond (or other guarantee per Section 30.03.08B.2) is required prior to the construction of the tower; that this approval also includes all future antennas proposed in conjunction with this tower, provided all future antennas are determined to not be visually obtrusive to this area; and that in order to construct this tower, building permits must be obtained for this tower prior to building permits being issued for any other communication tower within a radius of 600 feet otherwise additional land use applications may be required; within 2 years from the approval date the application must commence or the application will expire unless extended with approval of an extension of time; a substantial change in circumstances or regulations may warrant denial or added conditions to an extension of time; the extension of time may be denied if the project has not commenced or there has been no substantial work towards completion within the time specified; changes to the approved project will require a new land use application; and

the applicant is solely responsible for ensuring compliance with all conditions and deadlines.

Public Works - Development Review

- Drainage study and compliance;
- Road alignments shown on the Transportation Map must be dedicated at the widths shown on the map;
- Full off-site improvements shall be required with future development as determined by Public Works - Development Review Division;
- Applicant acknowledges that right-of-way dedications may be required in the future if the use changes;
- Utility pole locations must comply with Subsection 30.04.08.H.1.IV. of County Code.

Fire Prevention Bureau

- Applicant is advised that fire/emergency access and fire protection water supply must comply with the Fire Code as amended; and that permits may be required for this facility and to contact Fire Prevention for further information at (702) 455-7316.

Clark County Water Reclamation District (CCWRD)

- Applicant is advised that the CCWRD is unable to verify sewer capacity based on this zoning application; and may find instruction for submitting a Point of Connection (POC) request on the CCWRD's website; and that a CCWRD approved POC must be included when submitting civil improvement plans.

TAB/CAC:

APPROVALS:

PROTESTS:

APPLICANT: 328CH 8ME, LLC

CONTACT: ENERGY PROJECT SOLUTIONS, 4675 W. TECO AVENUE, SUITE 230, LAS VEGAS, NV 89118