

08/20/25 BCC AGENDA SHEET

PUBLIC HEARING

APP. NUMBER/OWNER/DESCRIPTION OF REQUEST

UC-25-0479-USA:

USE PERMITS for the following: **1)** large-scale electric generation (solar) facility; **2)** public utility structures (substation, utility poles, and aboveground utility lines) and all ancillary structures; and **3)** communication tower and associated equipment and structures.

WAIVERS OF DEVELOPMENT STANDARDS for the following: **1)** increase structure height; **2)** reduce security fence height; **3)** eliminate buffering and screening; and **4)** waive full off-site improvements.

DESIGN REVIEWS for the following: **1)** a large scale, solar electric generation facility; **2)** public utility structures and all ancillary structures; and **3)** a communication tower and all associated equipment on a 1,327.0 acre portion of a 7,710.7 acre site in an RS80 (Residential Single-Family 80) Zone.

Generally located southwest of State Highway 160 and northwest of Tecopa Springs Road within the Northwest County Planning area. JJ/hw/kh (For possible action)

RELATED INFORMATION:

APN:

171-00-001-004; 171-00-001-005; 171-00-001-012; 171-00-001-017; 171-00-001-018; 171-00-002-002; 171-00-002-003; 171-00-002-011 through 171-00-002-014; 197-00-001-003

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. Reduce the minimum height of barbed wire in conjunction with a security fence to 6 feet where 8 feet is the minimum per Section 30.04.03D (a 19% reduction).
3. Eliminate buffering and screening requirements where required per Section 30.04.02.
4. Waive full off-site improvements (curb, gutter, sidewalks, streetlights, and partial paving) along Tecopa Springs Road where off-site improvements are required per Section 30.04.08C.

LAND USE PLAN:

NORTHWEST COUNTY - OPEN LANDS

BACKGROUND:

Project Description

General Summary

- Site Address: N/A
- Site Acreage: 1,327.0 (portion)/7,710.7 (overall)

- Project Type: Large scale solar electric generation facility with accessory public utility structures and a communication tower
- Building Height (feet): 199 (maximum)

Site Plan

The plan depicts a proposed solar photovoltaic electric generation facility and substation with accessory operation buildings, and public utility structures located southwest of State Highway 160 between the Clark County/Nye County line and Tecopa Springs Road. The plans show a majority of the 1,327 acre site will be dedicated to the solar photovoltaic electric generation facility and its panels and accessory structures with these structures comprising 884.3 acres. The remaining acreage is dedicated to the associated generation tie (gen-tie) overhead transmission lines, and utility poles. The solar electric generation facility portion of the project is in the southern portion of the subject site, approximately 5.5 miles south of State Highway 160, primarily within APNs 171-00-002-011, 171-00-002-012, 171-00-002-013, 171-00-002-014, and 197-00-001-003. The solar electric generation facility project area is triangular in nature and is bounded by Tecopa Springs Road to the southeast, Hidden Hills Road on the north and the County line on the west. The solar electric generation facility is shown to be 4,554 feet to 4,928 feet from the east property lines, 1,040 feet to 1,521 feet from the north property lines, 1,343 feet to the south property line, and 30 feet from the west property lines.

A 6 foot high security fence with 1 foot of barbed wire will surround the entire solar electric generation facility. Within the fenced area, solar panels are at least 30 feet from the west boundary, 40 feet from the Tecopa Spring Road right-of-way, 30 feet from the north boundary, and 99 feet from the northwest corner. The solar electric generation facility panel areas are broken down into 3 main panel areas with 1 in the northeast portion of the site, another in the northwest, and the last 1 in the southern portion of the site. These panel areas consist of long rows of panels with collector invertors on raised pads at regular intervals and are sited independent of each other.

The site is broken into these panel areas to avoid a Y-shaded wash area that has significant slope areas. Each panel area consists of an internal network of 12 foot wide graveled access roads that 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. Each panel area will have at least 1 main entrance to exterior roads. The northwest panel area will have access to Hidden Hills Road through a 16 foot wide gated driveway located approximately 800 feet east of the County line. The gate at this entrance will be located 24 feet from the edge of Hidden Hills Road. The northeast panel area will have access through 2 gated driveways. The first entrance is a 24 foot wide access gate that will access an internal, 24 foot wide, paved road that will access the substation and switchyard areas. This entrance is located 625 feet west of Tecopa Springs Road along Hidden Hills Road. The second entrance will access the same paved internal drive aisle on the south end and along Tecopa Springs Road. This entrance is also gated with the gate 24 feet wide and set back 61 feet from Tecopa Spring Road. This entrance driveway is approximately 900 feet south of Hidden Hills Road. The final access point to the site is for the southern panel area. This access point is a 16 foot wide gated driveway and is located 1,500 feet northwest of the southern point of the subject

site along Tecopa Springs Road. The gate is set back 40 feet from the edge of Tecopa Springs Road.

Substation and switchyard facilities for the site are located in the northeast corner of the facility area. Both the substation and switchyard facilities are shown to be 2 acres each with the switchyard shown to be 62 feet south of Hidden Hills Road and 64 feet northwest of Tecopa Springs Road. The substation is about 140 feet west of the switchyard area. The plans show for both substation and switchyard areas the equipment will be located centrally within the pad sites with a control building either to the north or south of the equipment. Additionally, a microwave communication tower is located at the northwest corner of the switchyard building, approximately 51 feet south of Hidden Hills Road and an operation and maintenance building is at the southwest corner of switchyard area, approximately 30 feet south. The plans show the substation and switchyard areas on the plans could be converted to solar panel areas should these areas switch to the opposite corner in the northwest of the solar electric generation facility. To the southwest of the substation area is an area that will be reserved for either BESS enclosures or additional photovoltaic (PV) arrays, but this area will be entitled through UC-25-0480.

The gen-tie portion of the project is shown to start at the north end of the switchyard pad and will extend northwest along Tecopa Springs Road. These structures will be located within a 400 foot wide utility pole corridor and will generally be set back approximately 60 feet from Tecopa Springs Road. The gen-tie lines are shown to run approximately 4.5 miles northeast along Tecopa Springs Road before turning northwest for 1,000 feet where the gen-tie lines will connect with the existing Trout Canyon Substation. The plans also show the potential for an additional 130 foot wide gen-tie corridor that could run along the northern boundary of the solar electric generation facility.

Landscaping

The plans show that there is no proposed landscaping besides the natural landscaping that will remain on-site.

Elevations

The plans show the gen-tie, 230kV overhead transmission line structures will primarily be tall poles with conductors typically 47 feet to 67 feet off the ground. The elevations indicate these structures will be a maximum of 199 feet. Within the electrical substation and switchyard areas, various steel pole towers, transformers, and similar structures will be used with the tallest structure being 90 feet. Additionally, the control buildings within the switchyard and substation are shown to have painted metal exteriors with access doors on 2 sides and will be approximately 12 feet tall. The elevations show that each inverter enclosure will consist of a painted metal exterior with latched doors on 1 side and with a maximum height of 7.5 feet. The proposed PV panels are shown to also be painted metal with a maximum height of 18 feet when at a maximum 45 to 60 degree angle. The operations and maintenance building on-site are shown to consist of painted metal exteriors with pitched metal roofs. The buildings will be a maximum 20 feet tall with access doors and canopy located on 2 sides of the building. Finally, the proposed communication tower will be up to 100 feet tall, and the metal exterior will be painted a neutral color. The tower will be able to accommodate up to 3 arrays.

Applicant's Justification

The reduction in separation to residential uses for the electric generation facility and the decrease in barbed wire height is justified as the area surrounding the subject site being rural open lands and/or electric generating and associated facilities. Also, the BLM area of land adjacent to the east of the project is reserved for the Stump Springs Regional Augmentation Site and it is not anticipated that there will be any future development. Additionally, the elimination screening and buffering 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. Finally, the scope of the development, that is proposed along the west side of the Tecopa Springs Road corridor, is limited to the installation of individual private access entrance driveways to the proposed subject site, without installation on any new public access road. The land adjacent to the east of the project site, and Tecopa Springs Road, is BLM land that is reserved for the Stump Springs Regional Augmentation Site, and it is not anticipated that there will be any future development, so the installation of off-site is not expected to be an issue.

Prior Land Use Requests APNs 171-00-001-004, 171-00-001-005, & 171-00-001-012

Application Number	Request	Action	Date
UC-24-0757*	Solar electric generation facility with substation and public utility structures	Approved by BCC	February 2025
UC-24-0579*	Overhead transmission lines and other public utility structures	Approved by BCC	December 2024
UC-23-0713*	Electric substation, overhead transmission lines, and other public utility structures	Approved by BCC	December 2023
UC-23-0424	Solar electric generation facility with overhead transmission lines and public utility structures	Approved by BCC	October 2023
UC-21-0302*	Electric substation, overhead transmission lines, and other public utility structures	Approved by BCC	August 2021
UC-20-0360	Solar electric generation facility with substation and public utility structures	Approved by BCC	October 2020

*Only for APNs 171-00-001-004 & 171-00-001-005

Prior Land Use Requests APNs 171-00-001-017 & 171-00-001-018; 171-00-002-002, 171-00-002-003, 171-00-002-011, & 171-00-002-012

Application Number	Request	Action	Date
UC-23-0424	Solar electric generation facility with overhead transmission lines and public utility structures	Approved by BCC	October 2023

Surrounding Land Use

	Planned Land Use Category	Zoning District (Overlay)	Existing Land Use
North	Open Lands	RS80	Solar generation facility & undeveloped
South & East	Open Lands	RS80	Undeveloped
West	Nye County	R, MU, & LI	Undeveloped

Related Applications

Application Number	Request
UC-25-0480	A use permit for a BESS & substation facility with overhead utility lines and other public utility structures is a related item on this agenda.

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 significant history of electric generation facilities, transmission lines, and similar facilities on both the subject site and the surrounding area. In addition, staff finds there is already an existing and operating solar photovoltaic electric generation facility adjacent to the site. 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 will be no new visual impacts. Additionally, the proposed communication tower will be integrated into 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. 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. For these reasons, 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 are currently found 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 already exist 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 east 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 surrounding area and the unmanned nature subject site, along with the existing facilities in the area, there should be very little pedestrian traffic along State Highway 160 and the surrounding area. Additionally, the barbed wire is still placed well above the height of the average person and the barbed wire is being used for legitimate security purposes. Finally, similar fencing has been approved for similar facilities in the area with no issues. For these reasons, staff can support this request.

Waiver of Development Standards #3

Given the rural nature of the surrounding area and the general use of the surrounding area for public utility purposes, staff finds it unlikely there will be much residential development in the surrounding area. Additionally, the nearest development residential use is several miles away. The surrounding area has generally maintained its rural desert landscaping, so the placement of a screening buffer would be out of place for the area. 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 this request.

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 other 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.

Overall, staff finds that the design of the proposed solar electric generation facility, substation, utility towers, and communication tower are similar to those in the area. The proposed structures properly account for existing topographical features and are integrated with the existing solar generation facilities nearby. The proposed facilities are concentrated in areas with existing

electric generation facilities, far from any existing residential uses. In addition, the facility has mitigated possible visual effects by locating within an existing solar generation facility and within an area with 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 this request.

Public Works - Development Review

Waiver of Development Standards #4

Staff has no objection to the request to not install full off-site improvements. The parcels lie within a rural open land district with no immediate neighbors, resulting in the existing non-urban standards for the roadway.

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.
- 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.

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 there are no public sanitary sewer facilities available within the proposed development and none are planned within the next 5 years.

TAB/CAC:

APPROVALS:

PROTESTS:

APPLICANT: ROUGH HAT 2 SOLAR, LLC

CONTACT: LOGAN WAITE, ENERGY PROJECT SOLUTIONS, 4675 W. TECO AVENUE, LAS VEGAS, NV 89118