

OVERHEAD TRANSMISSION LINES  
(TITLE 30)

SR 160/TECOPA SPRINGS RD  
(NORTHWEST COUNTY, SOUTH COUNTY,  
SANDY VALLEY, GOODSPRINGS)

PUBLIC HEARING

APP. NUMBER/OWNER/DESCRIPTION OF REQUEST

**UC-23-0713-USA:**

**USE PERMITS** for the following: **1)** overhead power transmission lines; **2)** electrical substation; **3)** increase the height of utility structures; **4)** public utility structures with all accessory structures; **5)** waive landscaping and screening requirements; and **6)** eliminate trash enclosure.

**DESIGN REVIEWS** for the following: **1)** overhead power transmission lines; **2)** electrical substation; **3)** public utility structures with all accessory/ancillary structures and uses; **4)** final grading for a Hillside Development (slopes greater than 12%); and **5)** finished grade on 43,949.2 acres in an R-U (Rural Open Land) Zone, an H-2 (General Highway Frontage) Zone, and a P-F (Public Facility) Zone.

Generally located on the Nye/Clark County border, continuing 16 miles southeast along SR 160, then continuing 27 miles southeast crossing Sandy Valley Back Road and Sandy Valley Road to the west side of I-15, 3 miles south of Jean, then continuing 19 miles east of I-15 to the Boulder City border within the Northwest County and South County Planning Areas and portions of Sandy Valley and Goodsprings. RM/JJ/MN/md/syp (For possible action)

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RELATED INFORMATION:

**APN:**

List on file.

**USE PERMITS:**

1. 500 kV overhead transmission lines.
2. 500 kV electrical substation in an R-U zone.
3. Permit public utility structures with all accessory structures.
4.
  - a. Increase the height of public utility structures (overhead power transmission lines) up to 245 feet where 35 feet is the maximum height permitted within an R-U zone per Table 30.40-1 (a 600% increase).
  - b. Increase the height of public utility structures (overhead power transmission lines) up to 245 feet where 35 feet is the maximum height permitted within an H-2 zone per Table 30.40-7 (a 600% increase).
5. Waive all landscaping and screening requirements per Chapter 30.64.
6. Eliminate trash enclosures where required per Section 30.56.120.

**DESIGN REVIEWS:**

1. Overhead power transmission lines.
2. Electrical substation.
3. Public utility structures with all accessory/ancillary structures and uses.
4. Final grading plan for a Hillside Development (slopes greater than 12%) where required per Section 30.56.100.h.
5. Increase finished grade up to 65 inches where a maximum of 36 inches is the standard per Section 30.32.040 (an 80.6% increase).

**LAND USE PLAN:**

SOUTH COUNTY - OPEN LANDS

NORTHWEST COUNTY - OPEN LANDS

**BACKGROUND:****Project Description****General Summary**

- Site Address: N/A
- Site Acreage: 43,949.2
- Project Type: Overhead transmission lines
- Number of Stories: 1 (control enclosure)
- Building Height (feet): 245 (overhead power transmission lines)/115 (electrical substation equipment)/11 (control enclosure)
- Square Feet: 1,800 (control enclosure)

**History & Request**

This is a project of regional significance as defined by Title 30 as the development proposal is located within a half mile of a local government's jurisdiction (Nye County and Boulder City). The project site was previously approved for an 80 mile 230 kV overhead power transmission line extending from the Nye County/Clark County border to Boulder City via UC-1972-94 by the Board of County Commissioners in January 1995. The purpose of this application is to upgrade to a 500 kV overhead power transmission line between the Trout Canyon and Sloan Canyon transmission line segment. The upgrade consists of the construction and installation of 500 kV transmission lines generally adjacent to the existing 230 kV transmission line alignment in addition to expanding and upgrading the previously approved Trout Canyon electrical substation, UC-21-0302. Following construction of the upgraded 500 kV transmission line, the approximately 59 miles of existing 230 kV transmission line would be decommissioned.

The project within the Trout Canyon to the Nye/Clark County border segment consists of upgrading an existing single circuit 230 kV overhead transmission line system to a double circuit 500 kV overhead transmission line. The location of the upgraded transmission line would generally be adjacent to the existing single circuit 230 kV transmission line alignment. The existing overhead transmission line system is approximately 6.23 miles long and comprised of two segments of a single circuit 230 kV transmission line. The approximately 6.23 miles of existing 230 kV transmission line would be decommissioned following construction of the upgraded transmission line.

The applicant indicates there will be a temporary 230 kV transmission line routed out of the existing Trout Canyon electrical substation to create an area to construct the 500 kV connection line. From the Trout Canyon substation, heading northwest towards Pahrump, it is undecided whether the upgrade will include the 230 kV option, or the 500 kV option. If the 500 kV option is built, the line route out of the Trout Canyon substation will be built only temporarily to accommodate the construction of the 500 kV line. After construction, the 230 kV temporary line would be decommissioned and removed. If the 230 kV option is constructed, the transmission lines would remain as permanent structures.

#### Site Plan

The first component of the development consists of an expansion to the previously approved Trout Canyon electrical substation located on the west side of SR 160 and the north side of Tecopa Springs Road. The proposed 500 kV substation, situated on 54.9 acres, is located 1,100 feet north of the previously approved substation within APNs 198-00-002-026 and 171-00-001-004 through 005. The proposed facility consists of breakers, high voltage electrical controls, a control enclosure, and ancillary structures. Access to the electrical station will be from the Yellow Pine 2 access road adjacent to Tecopa Springs Road approximately 0.6 miles south of the SR 160 intersection. The substation will be secured by a 16 foot wide swing gate, including a chain-link perimeter fence measuring 6 feet in height with an additional 12 inches of barbed wire strand (7 feet in total height). Construction and maintenance vehicles traveling through the site will stop temporarily at places of work within the boundaries of the facility. There are no proposed occupiable structures proposed within this development.

The second component of the development, as depicted on the plans, consists of a 500 kV overhead power transmission line extending approximately 59 miles in length. The corridor commences at the Nye/Clark County border, continuing 16 miles southeast along SR 160, then continues 27 miles southeast crossing Sandy Valley Back Road and Sandy Valley Road to the west side of I-15, 3 miles south of Jean, then continues an additional 19 miles east of I-15 terminating at the Boulder City border. The transmission lines will cross Bureau of Land Management property and will not access any privately owned property. The area of the proposed transmission line infrastructure measures up to 275 feet in width and consists of steel poles and lattice structures measuring up to 245 feet in height.

#### Landscaping

No landscaping is provided with this request.

#### Elevations

The plans depict an 11 foot high control enclosure with pre-fabricated building materials consisting of metal, also enclosed by a metal roof. The overhead power transmission lines have an overall height of 245 feet. The equipment within the electrical substation measures up to 115 feet in height.

#### Floor Plan

The control enclosure building measures 1,800 square feet.

### Signage

Signage is not a part of this request.

### Applicant's Justification

The applicant indicates the purpose of this project is to address reliability, public policy and economic needs for the region. The applicant states that the proposed development complies with multiple goals and policies from the Master Plan including incorporating enhanced sustainability and resiliency practices; encouraging the development of transmission capability and interconnectivity for distributed energy; collaborating with service providers and adjacent jurisdictions; and increasing the capacity of existing utility corridors. The applicant proposed to waive all screening and landscape requirements as the site is surrounded by rural, vacant lands to the north that are primarily owned by the Bureau of Land Management and are not anticipated for future development. The site is surrounded by the Yellow Pine Solar Project to the south and west. Periodically, minimal maintenance staff will be on-site, and any trash will be taken offsite by the maintenance and operations crews. Therefore, dumpster service is not anticipated to be necessary for the project. The proposed overhead transmission line pole structures will be a maximum height of 245 feet and will be consistent with existing overhead transmission line pole heights that are adjacent. The applicant indicates the increase in finished grade is necessary to accommodate slope requirements to construct the substation upgrades. A final grading plan is also requested for the proposed development and all temporary disturbance areas will be restored upon completion of construction, while structure pads and access roads will remain graded permanently.

### **Prior Land Use Requests**

<b>Application Number</b>	<b>Request</b>	<b>Action</b>	<b>Date</b>
UC-23-0424	Electric generating station (solar photovoltaic facility), electric substation, overhead power transmission line, increased the height of utility structures, public utility structures with all accessory structures, waived landscaping and screening requirements, eliminated trash enclosure, waived noise standards, and allowed signage in conjunction with the electric generating station and electrical substation with a waiver for off-site improvements (curb, gutter, sidewalk, streetlights, and paving)	Approved by BCC	October 2023
UC-23-0401	Electric generating station (solar photovoltaic facility), electrical substation, generation intertie transmission line, allowed public utility structures with all accessory/ancillary structures, eliminated landscaping and screening requirements, eliminated trash enclosure, increased the height of utility structures, noise limits, and allowed signage	Approved by BCC	September 2023

**Prior Land Use Requests**

<b>Application Number</b>	<b>Request</b>	<b>Action</b>	<b>Date</b>
UC-21-0302	Electrical substation, increased the height of utility structure, an overhead power transmission line, waived landscaping and screening requirements, eliminated trash enclosure, and allowed signage in conjunction with the proposed electric generating station, waivers for off-site improvements (curb, gutter, sidewalk, streetlights, and partial paving), and design reviews for public utility structures, electrical substation, maintenance building, and all ancillary structures and facilities	Approved by BCC	August 2021
UC-20-0360	Alternating current electric generating station (solar photovoltaic facility) and all ancillary structures, increased the height of utility structures, electrical substation, overhead power transmission line corridor, waived landscaping and buffering, waived trash enclosure, waived on-site paving requirements, allowed signage in conjunction with the proposed electric generating station with design reviews for electric generating station (solar photovoltaic facility) with all ancillary structures and uses, public utility structures, electrical substation, office and maintenance buildings, and all ancillary structures and facilities	Approved by BCC	October 2020
UC-0553-10	Overhead power transmission lines and increased height of transmission lines	Approved	January 2011
UC-1018-07	Overhead power transmission lines	Approved by PC	October 2007
UC-1972-94	Overhead power transmission lines	Approved by PC	January 1995

**Surrounding Land Use**

	<b>Planned Land Use Category</b>	<b>Zoning District</b>	<b>Existing Land Use</b>
North & South	Open Lands	R-U	Undeveloped
East	Open Lands	R-U	Undeveloped & Boulder City
West	Open Lands	R-U	Undeveloped & Nye County

**STANDARDS FOR APPROVAL:**

The applicant shall demonstrate that the proposed request meets the goals and purposes of Title 30.

## **Analysis**

### **Comprehensive Planning**

#### Use Permits

A use permit is a discretionary land use application that is considered on a case by case basis in consideration of Title 30 and the Master Plan. One of several criteria the applicant must establish is that the use is appropriate at the proposed location and demonstrate the use shall not result in a substantial or undue adverse effect on adjacent properties.

Staff finds the request to be consistent and in harmony with the purpose, goals, and objectives of the Master Plan. The proposed development is consistent with Clark County sustainability initiatives. Staff finds the request is consistent and compliant with the following Countywide Goals and Policies from the Master Plan:

- Goal 3.2, which aims to incorporate enhanced sustainability and resilience practices into the built environment;
- Policy 3.6.8, which encourages the development of transmission capability and interconnectivity for distributed energy, cogeneration and alternative energy sources, including regional interconnectivity and transmission capability;
- Goal 6.4, which encourages collaboration with service providers and adjacent jurisdictions in the provision of adequate public facilities;
- Policy 6.4.8, which supports increasing the capacity of existing utility corridors over establishing new ones. If established corridors cannot meet utility demand, support the development of new multi-use utility corridors that ensure safe siting of transmission lines to minimize impacts on existing development.

The overhead transmission lines and structures are located within zoning districts which are planned for very low density residential uses and other appropriate uses of the vast areas of rural land. The proposed overhead power transmission lines are located within an area where no services are available, such as water and sanitation. Therefore, staff recommends approval of the use permits for the proposed facilities and supports waiving the various requests associated with this development.

#### Design Reviews #1 through #3

Staff finds the site design of the overhead transmission lines and associated structures are consistent with the requested use permit and within the guidelines established by Code. The project is designed with consideration of protecting and minimizing any negative impact to the environment. The project complies with several goals and policies from the Master Plan; therefore, staff recommends approval.

#### Design Review #4

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. Staff finds the final grading plan complies with the development restrictions as the drawings indicate that slopes greater than 12% will not be disturbed by the proposed development. Therefore, staff recommends approval of the final grading plan.

## **Public Works - Development Review**

### **Design Review #5**

This design review represents the maximum grade difference within the boundary of this application. This information is based on preliminary data to set the worst case scenario. Staff will continue to evaluate the site through the technical studies required for this application. Approval of this application will not prevent staff from requiring an alternate design to meet Clark County Code, Title 30, or previous land use approval.

## **Department of Aviation**

Federal Aviation Regulations (14 CFR, Part 77) require that the Federal Aviation Administration (FAA) be notified before the construction or alteration of any building or structure that will exceed a slope of 100:1 for a distance of 20,000 feet from the nearest point of any airport runway or for any structure greater than 200 feet in height. Therefore, as required by 14 CFR Part 77, and Section 30.48.120 of the Clark County Unified Development Code, the FAA must be notified of the proposed construction or alteration.

On parcels located near the future Southern Nevada Supplemental Airport (SNSA), the specific heights of the power poles are not shown. The applicant's airspace representative has communicated to the Department of Aviation (DOA) that poles located within the vicinity of the SNSA are being lowered, which would require the applicant to submit the accurate, complete, and updated information to the Comprehensive Planning Department, allowing for the DOA to review and possibly amend the DOA comment as necessary.

## **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**

- Applicant is advised that the County has adopted a rewrite to Title 30 effective January 1, 2024, and future land use applications, including applications for extensions of time, will be reviewed for conformance with the regulations in place at the time of application; 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; and that this application must commence within 2 years of approval date or it will expire.

## **Public Works - Development Review**

- Drainage study must demonstrate that the proposed grade elevation differences outside that allowed by Section 30.32.040(a)(9) are needed to mitigate drainage through the site.

- Applicant is advised that approval of this application will not prevent Public Works from requiring an alternate design to meet Clark County Code, Title 30, or previous land use approvals.

#### **Department of Aviation**

- Applicant is required to file a valid FAA Form 7460-1, "Notice of Proposed Construction or Alteration" with the FAA, in accordance with 14 CFR Part 77, or submit to the Director of Aviation a "Property Owner's Shielding Determination Statement" and request written concurrence from the Department of Aviation;
- If applicant does not obtain written concurrence to a "Property Owner's Shielding Determination Statement," then applicant must also receive either a Permit from the Director of Aviation or a Variance from the Airport Hazard Areas Board of Adjustment (AHABA) prior to construction as required by Section 30.48 Part B of the Clark County Unified Development Code; applicant is advised that many factors may be considered before the issuance of a permit or variance, including, but not limited to, lighting, glare, graphics, etc.;
- No building permits should be issued until applicant provides evidence that a "Determination of No Hazard to Air Navigation" has been issued by the FAA or a "Property Owner's Shielding Determination Statement" has been issued by the Department of Aviation.
- Applicant is advised that the FAA's determination is advisory in nature and does not guarantee that a Director's Permit or an AHABA Variance will be approved; that FAA's airspace determinations (the outcome of filing the FAA Form 7460-1) are dependent on petitions by any interested party and the height that will not present a hazard as determined by the FAA may change based on these comments; that the FAA's airspace determinations include expiration dates; and that separate airspace determinations will be needed for construction cranes or other temporary equipment.

#### **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:** Sandy Valley - approval.

**APPROVALS:**

**PROTESTS:**

**APPLICANT:** GRIDLIANCE WEST, LLC

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