

**U.S. Department of the Interior
Bureau of Land Management**

Categorical Exclusion

DOI-BLM-NV-L060-2023-0008-CX

CG Northwestern Wind II

N-099926 Solar Testing

N-099927 Meteorological Testing

August 17, 2023

PREPARING OFFICE

U.S. Department of the Interior
Bureau of Land Management

Bristlecone Field Office
Ely, Nevada



Background

BLM Office: LLNVL06000

Proposed Action Title/Type: N-099926 CG Northwestern Wind II ROW Solar Site Test
N-099927 CG Northwestern Wind II ROW Meteorological Site Test

Location of Proposed Action: Solar

Mt. Diablo Meridian,

T.16 N., R.60 E.,

sec. 3, lots 1-8, S1/2NE1/4, S1/2NW1/4, S1/2;
sec. 4, lots 1-8, S1/2NE1/4, S1/2NW1/4, S1/2;
sec. 5, lots 1-8, S1/2NE1/4, S1/2NW1/4, S1/2;
sec. 6, lots 1-16, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4, SE1/4;
sec. 7, lots 1-8, E1/2, E1/2NW1/4, E1/2SW1/4;
sec. 8-10;

T.17 N., R.60 E.,

Sec. 11;
Sec. 14-15;
sec. 20, S1/2;
sec. 21-23;
sec. 26-29;
sec. 30, E1/2;
sec. 31, lots 1-8, E1/2, E1/2NW1/4, E1/2SW1/4;
sec. 32-35.

Location of Proposed Action: Wind

Mt. Diablo Meridian,

T.18 N., R.59 E.,

sec. 1, lots 1-4, S1/2NE1/4, S1/2NW1/4, S1/2;

T. 19 N., R.59 E.,

sec. 2, lots 1-4, E1/2NW1/4, E1/2SW1/2, S1/2;
sec. 11-14;
sec. 23-25;
sec. 36;

T. 18 N., R.60 E.,

sec. 1, lots 1-8, S1/2NE1/4, S1/2NW1/4, S1/2;
sec. 2, lots 1-8, S1/2NE1/4, S1/2NW1/4, S1/2;
sec. 3, lots 1-8, S1/2NE1/4, S1/2NW1/4, S1/2;
sec. 4, lots 1-8, S1/2NE1/4, S1/2NW1/4, S1/2;
sec. 5, lots 1-8, S1/2NE1/4, S1/2NW1/4, S1/2;
sec. 6, lots 1-11, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4, SE1/4;
Sec. 8-12;

T. 19 N., R.60 E.,

sec. 6, lots 1-7, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4, SE1/4;
sec. 7, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 8;
sec. 17;
sec. 18, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;

sec. 19, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 20-23;
sec. 25-27;
sec. 29;
sec. 30, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 31, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 32-36;

T. 18 N., R.61 E.,

sec. 3-5;
sec. 6, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 7, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 8-10;
sec. 15-17;
sec. 18, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 19, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 20-22;
sec. 27-29;
sec. 30, lots 1-4, E1/2, E1/2NW1/4, E1/2SW;
sec. 31, lots 1-14, NE1/4, E1/2NW1/4;
sec. 32, lots 1-12, N1/2;
sec. 33, lots 1-12, N1/2;

T. 19 N., R.61 E.,

sec. 17;
sec. 18, lots 1-4, E1/2, E1/2NW1/4, E1/2SW1/4;
sec. 19, lots 1-4, E1/2, E1/2NW1/4, E1/2SW1/4;
sec. 20;
sec. 30, lots 1-4, E1/2, E1/2NW1/4, E1/2SW1/4;
sec. 31, lots 1-4, E1/2, E1/2NW1/4, E1/2SW1/4;
sec. 32-33.

Description of Proposed Action: CG Northwestern Wind II, LLC requests a Type 2 Right of Way (ROW) to conduct solar and meteorological testing in White Pine County, Nevada to collect data to determine overall suitability for potential development of a solar and wind generation facility. The proposed action requests to install, operate, and maintain one solar resource assessment (SRA) device on 15,727.7 acres and up to five meteorological monitoring devices (MET tower) on 46,205.2 acres of Bureau of Land Management (BLM) lands, near the Egan range, approximately 6 miles northwest of the town of Ruth, and 12 miles northwest of the town of Ely (Appendix 1, Map 1).

Solar Resource Assessment:

The temporary structure that would be installed is a ground-based SRA device to collect solar irradiation data to assess the potential for production of renewable solar energy. The temporary device will be 8 feet tall, and at its base measures 5-feet by 5-feet and includes 3-feet tall albedometer placed 30 feet away from the base of the device. Depictions of a typical SRA station and the paired albedometer are in Appendix 2, Figures 1 and 2 respectively.

The device would require approximately 700 square feet (0.016 acres) for installation. Installing the SRA device would take 1-2 days, depending on the site location and weather conditions. Ground disturbance would be limited to the temporary cattle fencing installed around the perimeter of the device. Temporary cattle fencing would consist of standard 4-to-5-foot T-posts and a galvanized wire mesh fence attached to the T-posts.

No equipment or component staging areas are needed outside of the area required to construct and install the SRA device. All equipment, including simple hand tools (hammer, screwdriver, ratchet, etc.) would be delivered to the proposed SRA location, where assembly would occur.

Table 1 Solar Monitoring Station Coordinates

Site Number	Latitude DD	Longitude DD	Latitude DMS	Longitude DMS
SRA-1	39.29477	-115.19848	39° 17' 41.15498904" N	115° 11' 54.52412849" W

Access

Access to the proposed SRA location would be provided via public roads and existing two-track roads. Site would be reached primarily from Jakes Wash Road and the Old Lincoln Highway. No new road or road improvements would be required to install the SRA device. The SRA location would be accessed with pick-up trucks (routes to each location from existing designated roads are detailed in Appendix 1, Map 2). There would be minimal temporary disturbance to access the two-track roads, with overland travel to the exact locations occurring on foot. If pre-installation field investigations show certain sites are inaccessible due to change in ground conditions (i.e. recent weather or precipitation events) then the location would be removed from consideration for SRA installation.

Solar Resource Assessment Operation and Maintenance

Each SRA would have a data logger powered by a battery that is charged through a solar panel; transmission of the solar data would be done remotely through 4G LTE cellular networks. The device is designed for year-round use and would be visited 2-4 times per year for servicing. The operation would not require water, would not involve, or utilize hazardous chemicals or wastes and would not generate solid or non-hazardous wastes.

Areas of Temporary and Permanent Disturbance

All impacts associated with the installation and decommissioning of the SRA device would be temporary. Total temporary disturbance associated with the monitoring location site would be approximately 0.016 acres, and would consist of areas traversed by installation equipment, limited vegetation clearing, minimal ground disturbance at the SRA anchor point, and the area encompassed by the physical footprint of the equipment.

The SRA device would be removed prior to the expiration of the Solar Testing ROW and there would be no associated permanent disturbance. The potential total temporary disturbances associated with each project component is listed below in Table 2.

Meteorological Towers:

Wind measurement locations are made up of temporary meteorological towers (MET), which would be a maximum of 80 meters in height above ground level and include guy wires, booms, instrumentation, a logger, and a modem. The base of each tower would rest on a galvanized metal plate covering 20 square feet on the ground (Appendix 2, Figure 7). Ground rods would be driven through the metal baseplate to secure it to the ground. Guy wires would extend to a maximum of 225 feet from the base of the tower. Each guy wire would be secured to ground anchors. Anchor bolts would be screwed-in and sunk in the ground to a depth of three to five feet (Appendix 2, Figure 8). No concrete or other foundations would be required. If an 80-meter MET tower is chosen for installation, the appropriate permits would be obtained from the FAA prior to installation, and the tower would be equipped with the required lighting/detection equipment.

A typical 60-meter MET tower configuration, including the sensors (anemometers), guys wires, and data logger/communications equipment is shown schematically in Figure 4. Each tower would be supported by 12 guy wires made of steel strand up to 3/8ths inch in diameter. The guy wires extend in four directions to an inner, middle, and outer wire anchor, and the wire loops at each anchor and connects back to the tower. The tower would have 24 connection points at 4 levels, extending out to 12 anchors. Configurations of towers and guy wires in plan and profile view are shown in Appendix 2, Figures 4 and 5. The towers are tubular structures, typically painted aviation colors with alternating aviation orange and white segments, in accordance with FAA Advisory Circular AC70/7460-1L.

The meteorological towers are expected to have minimal impacts on migratory birds, raptors, or eagles. MET towers would include high visibility sleeves, and marker balls to prevent bird strikes. High visibility sleeves (bright yellow) are 85 inches long and can be slipped over the lower portion of the guy wires to mark and protect them at anchor points. Orange marker balls would be either 9 or 12 inches in diameter and are made of plastic with protective UV coatings. They are clamped with bolts onto the wire and have drain holes to prevent water logging. One marker ball would be installed on each of the outer (top) guy wires for a total of four marker balls per tower. The marker balls are installed 10 feet down the wire below the guy ring [Appendix 2, Figures 6 and 8]. Horizontal components of the structure would be equipped with perch deterrent devices that discourage nesting and perching of raptors and corvids. No equipment or component staging areas needed outside of the area required to construct and install the MET towers. All equipment would be delivered to the proposed MET towers location, where assembly would occur.

Five locations are being considered for meteorological monitoring towers, which are listed below in Table 3 and shown in Appendix 1, Map 3-9. If micro-siting is required, it would be done within a 30-foot (10-meter) radius of these coordinates.

Table 3 MET Monitoring Station Coordinates

Site Number	Latitude DD	Longitude DD	Latitude DMS	Longitude DMS
MM-1	39.44717	-115.21789	39° 26' 49.80192864" N	115° 13' 04.41914230" W
MM-2	39.46813	-115.21786	39° 28' 05.27110307" N	115° 13' 04.30155123" W
MM-3	39.50691	-115.25812	39° 30' 24.89245565" N	115° 15' 29.24953329" W
MM-4	39.39732	-115.10554	39° 23' 50.34332148" N	115° 06' 19.95966242" W
MM-6	39.51396	-115.14991	39° 30' 50.25225126" N	115° 08' 59.67214189" W

Remote Sensing Device

Remote sensing device (Light Detection and Ranging [LIDAR] or Sound Detection and Ranging [SODAR]) would be installed at the potential tower locations to assist in the capture and correlation of wind resource data. These devices are typically housed in small mobile containers (rough dimensions 12 feet by 6 feet by 6 feet) and mounted on a temporary wooden stand measuring 3 feet by 3 feet and would be accompanied by a power supply trailer (7 feet by 12 feet) [Appendix 2, Figure 9]. The devices are on wheels and a platform and thus have a minimal impact on the ground surface. Four T-posts would be used to secure the platform of the trailer to the ground for security against theft and significant weather events (Appendix 2, Figure 10). The power trailer would be towed to each site using a standard pickup truck on existing roads.

Access

Access to the five MET tower locations would primarily be from U.S. Highway 50, with two locations being accessed from Thirty Mile Road. Locations were chosen based on their proximity to existing public roads and established two-track roads. No new road or road improvements would be required to install the MET towers. If pre-installation field investigations show certain sites are inaccessible due to change in ground conditions (i.e., recent weather or precipitation events) then the location would be removed from consideration for MET installation. All planned overland travel access paths are approximately 10 feet in width, or the standard width of a four-wheel drive truck (routes to each location from existing designated roads are detailed in Appendix 1, Map 3).

Areas of Temporary and Permanent Disturbance

All impacts associated with the installation and decommissioning of the MET towers would be temporary. Temporary disturbance associated with the monitoring location site would be approximately .85 acres, and would consist of areas traversed by installation equipment, limited vegetation clearing, minimal ground disturbance at anchor points, and the area encompassed by the physical footprint of the equipment.

Temporary disturbance is not anticipated for the proposed access routes as they are primarily located on existing two-track roads. There would be minimal temporary disturbance in accessing the MET tower locations due to overland travel from the defined access routes to the proposed installed location of the equipment. Generally, the maximum distance of overland travel would be less than 200 feet for each MET tower. Temporary disturbance related to overland access ranges from 0.02 to 0.05 acres which is based on the length of the two-track portion of the access route and a maximum disturbance width of 10 feet. The MET towers would be removed prior to the expiration of the Type II ROW and there would be no associated permanent disturbance. Total maximum temporary disturbance for five monitoring

locations would be no more than approximately 4.2 acres; while the total overland access temporary disturbance would be no more than 0.16 acres. The total temporary disturbances associated with each project component is described in Table 4 and shown in Appendix 1, Maps 4-9.

Table 4 MET Tower Temporary Disturbance

Project Component	Maximum Temporary Disturbance (Acres)
MM-1	0.85
MM-2	0.85
MM-3	0.85
MM-4	0.85
MM-6	0.85
Overland Access-1	0.05
Overland Access-2	0.02
Overland Access-3	0.04
Overland Access-4	0.00
Overland Access-6	0.05

Construction Methods

Installation of the MET towers would take approximately 3-5 days per tower, depending on the type of tower, location, and weather conditions. Each tower would require between .36 and .85 acres for installation. Total temporary disturbance is anticipated to be .02 to .05 acres per tower. Disturbance is limited to temporary fencing, ground compaction laying out the MET tower sections, and excavation of the guy wire anchors. Due to the potential for grazing activities in the vicinity of the MET towers, each tower base and anchor bolt location would be fenced in with temporary cattle fencing. Use of temporary cattle fencing would not increase the overall temporary disturbance as fencing would only be used where the MET tower components are anchored to the ground. Temporary cattle fencing would consist of standard 4-to-5-foot T-posts and a galvanized wire mesh fence attached to the T-posts (Appendix 2, Figures 6-8).

The towers would be assembled and erected by a crew of qualified installers using light equipment. Equipment required would be 2 or 3 pickup trucks or off-road vehicles (traveling on existing access roads) to transport the crew and towers to the sites, various hand tools, and a winch.

The tower would be constructed of galvanized steel tube and guyed at eight levels in four directions. Sections slide together and are secured using fasteners. The tower would be tilted up from the ground with a gin pole and winch. One end of the gin pole is attached to the tower base. The other end is suspended above ground and connected to the winch used to lift the gin pole and tower. The gin pole acts as a lever for lifting the tower. The winch would be positioned on or close to existing roads, where possible. Lifting of the tower would be accomplished using eight lifting wires attached to the gin pole. The tower would be stabilized using four guy wire sets. The base plate would be hinged so both the tower and ginpole can pivot to the erected position. The guy wires would be manually rolled out along the ground from the tower to each of the guy anchor points.

Installation of the LIDAR or SODAR unit would take 1-2 days per unit, depending on the location and weather conditions. The ground-based units would require approximately 0.005 acres for installation and ground disturbance would be limited to the temporary fencing installed around the perimeter of the unit. Due to the potential for grazing activities in the vicinity of the MET towers, each LIDAR unit would be surrounded by a series of four 10-foot corral panels that are connected to each other to form a perimeter

around the base of the LIDAR unit. Use of the temporary corral panels would not increase the overall temporary disturbance of installation.

Meteorological Tower Operation and Maintenance

MET Towers and LIDAR units would each have a data logger powered by a battery that is charged through a solar panel, and transmission of the wind data would typically be done remotely by mobile communications. The LIDAR unit trailer system contains over 1KW of photovoltaic capacity and 600 Ah of battery capacity. A crew is expected to service each MET tower and LIDAR unit between 2 and 4 times per year. The tower operations would not require water, would not involve, or utilize hazardous chemicals or wastes, and would not generate solid or non-hazardous wastes.

Termination and Reclamation

The Project would have a useful life of 3 years, after which the MET towers, anchors, and fencing would be removed; and the land restored as close as possible to its condition prior to construction. Following the removal of MET towers, sites would be raked out to conform to existing contours. Applicant would develop revegetation plan that would include site-specific, and agency approved mitigation and best management practices for reducing the potential impacts of project-related construction.

Land Use Plan Conformance

Land Use Plan Name: Ely District Resource Management Plan (RMP).

Date Approved/Amended: Approved 2008/Amended 2015

The Proposed Action is in conformance with the land use plan (LUP) because it is clearly consistent with the following LUP Goals and Objectives for Renewable Energy: Goals – Provide opportunities for development of renewable energy sources such as wind, solar, biomass, and other alternative energy sources while minimizing adverse impacts to other resources; Objectives - to respond to applications for renewable energy sites and associated rights-of-way, as encouraged by current BLM policy.

Land Use Plan Amendment Name: Nevada and Northeastern California Greater Sage-grouse Approved Resource Management Plan Amendment, 2022 Maintenance Action

Date Approved: September 2015

Compliance with NEPA

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 1, as per **H-1790-1, NEPA Handbook, Appendix 4, E-19:** “Issuance of short-term (3 years or less) rights-of-way or land use authorizations for such uses as storage sites, apiary sites, and construction sites where the proposal includes rehabilitation to restore the land to its natural or original condition.”

This Categorical Exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The Proposed Action has been reviewed, and none of the extraordinary circumstances described in 43 CFR 46.215 applies. Supporting documentation that the Extraordinary Circumstances were reviewed by appropriate resource specialists is attached.

I considered the Proposed Action and reviewed the 12 exceptions in the Extraordinary Circumstances Documentation. This action qualifies as a categorical exclusion and environmental analysis is not required. The Proposed Action is in conformance with current BLM Land Use Plans.

Approval and Contact Information

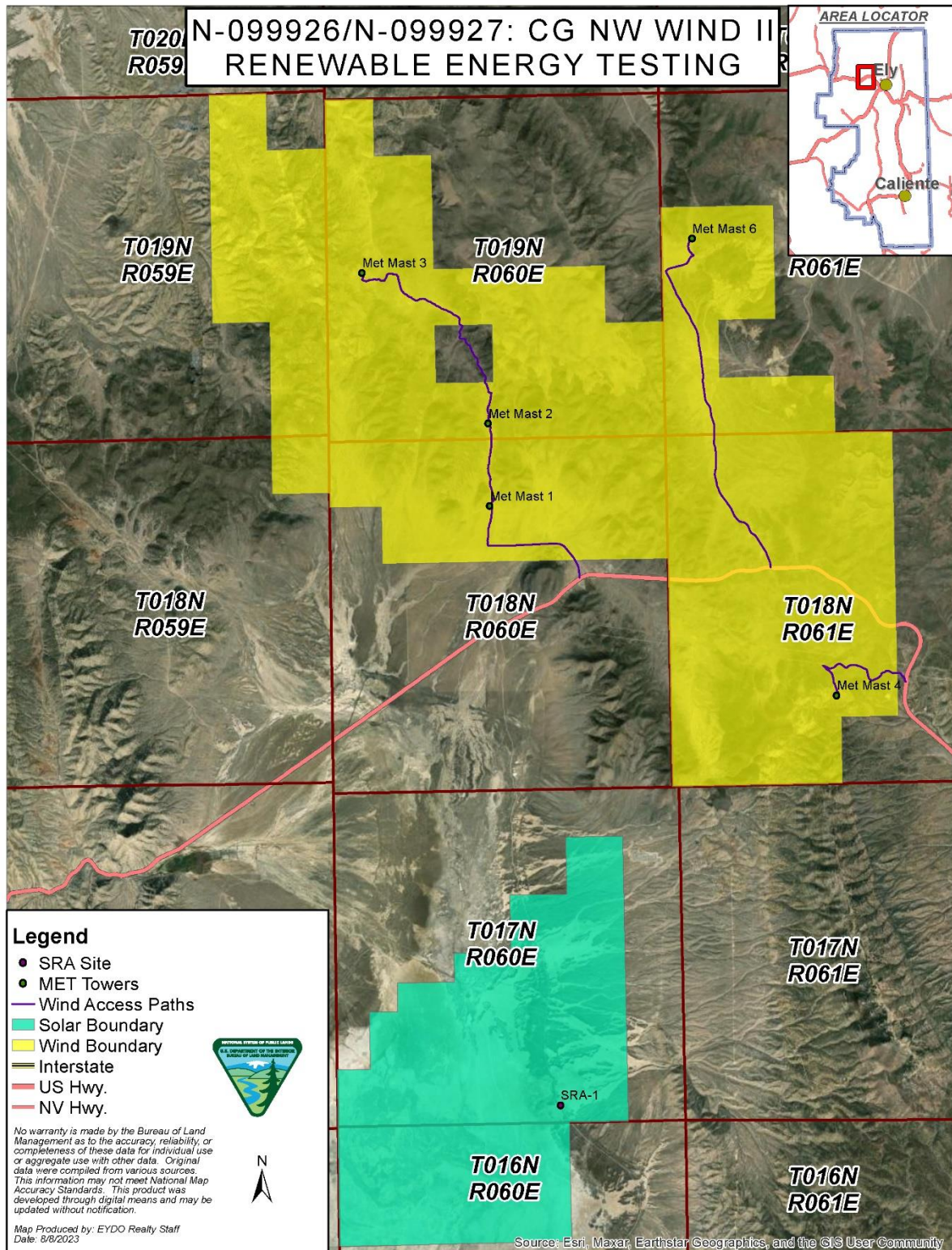

Jared Bybee
Bristlecone Field Manager

8/17/2023
Date

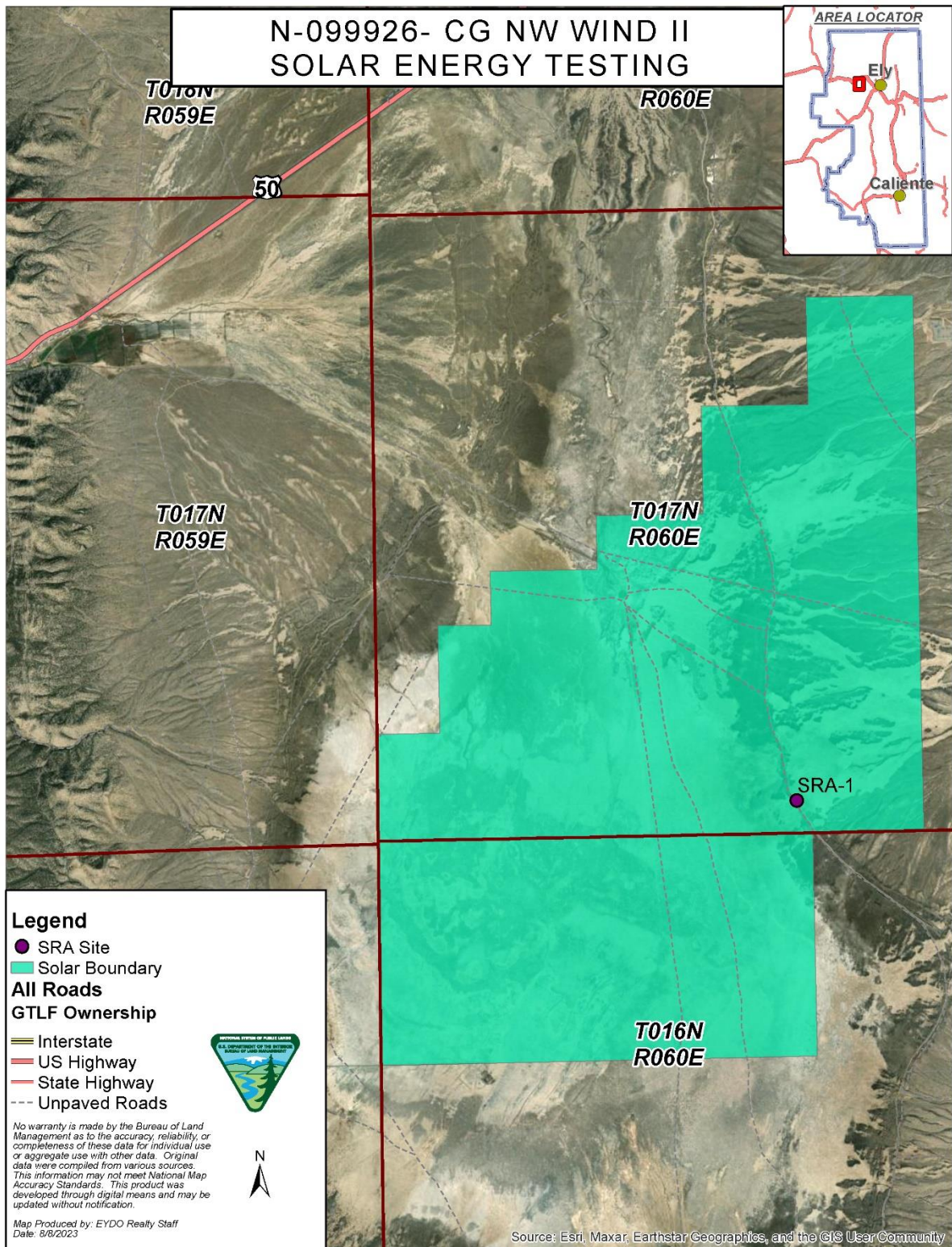
Contact Person

Amber Copeland
Realty Specialist
Ely District Office – Bristlecone Field Office
702 N. Industrial Way
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(775) 289-1841

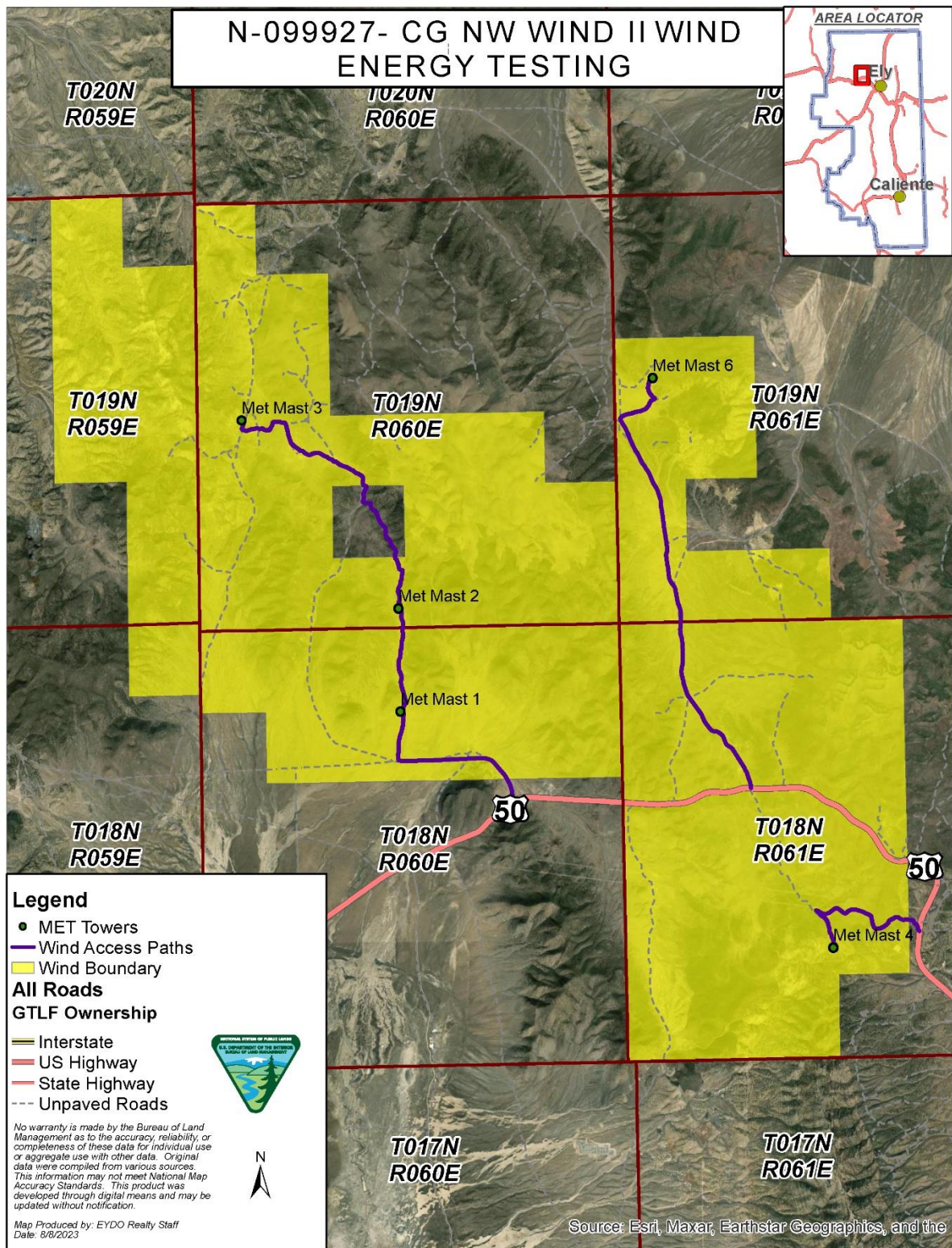
Appendix 1. Area Maps



Map 1 Solar and Wind Proposed Project Locations with Road Access over Topography



Map 2 Proposed SRA Device Site



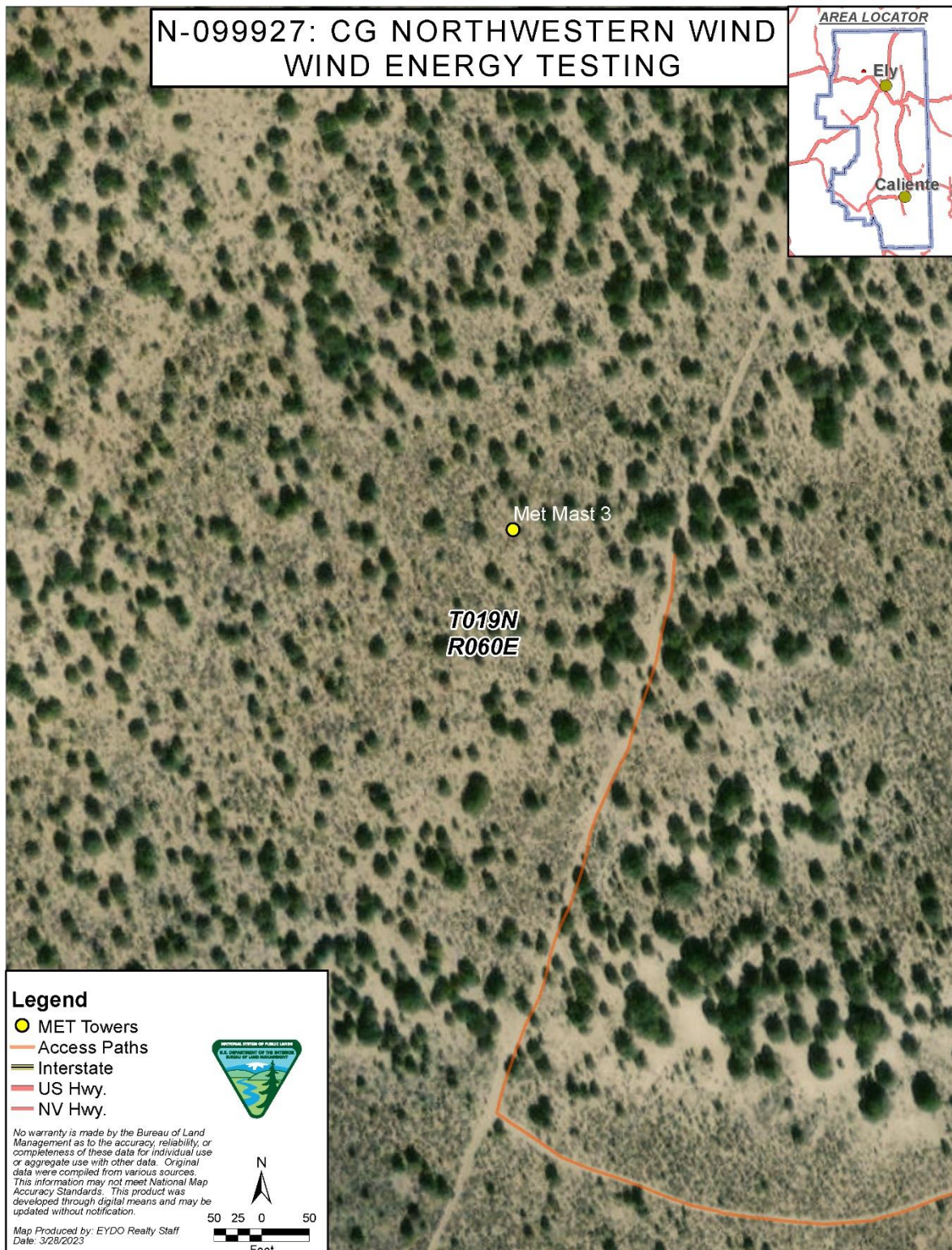
Map 3 Potential MET Tower Sites



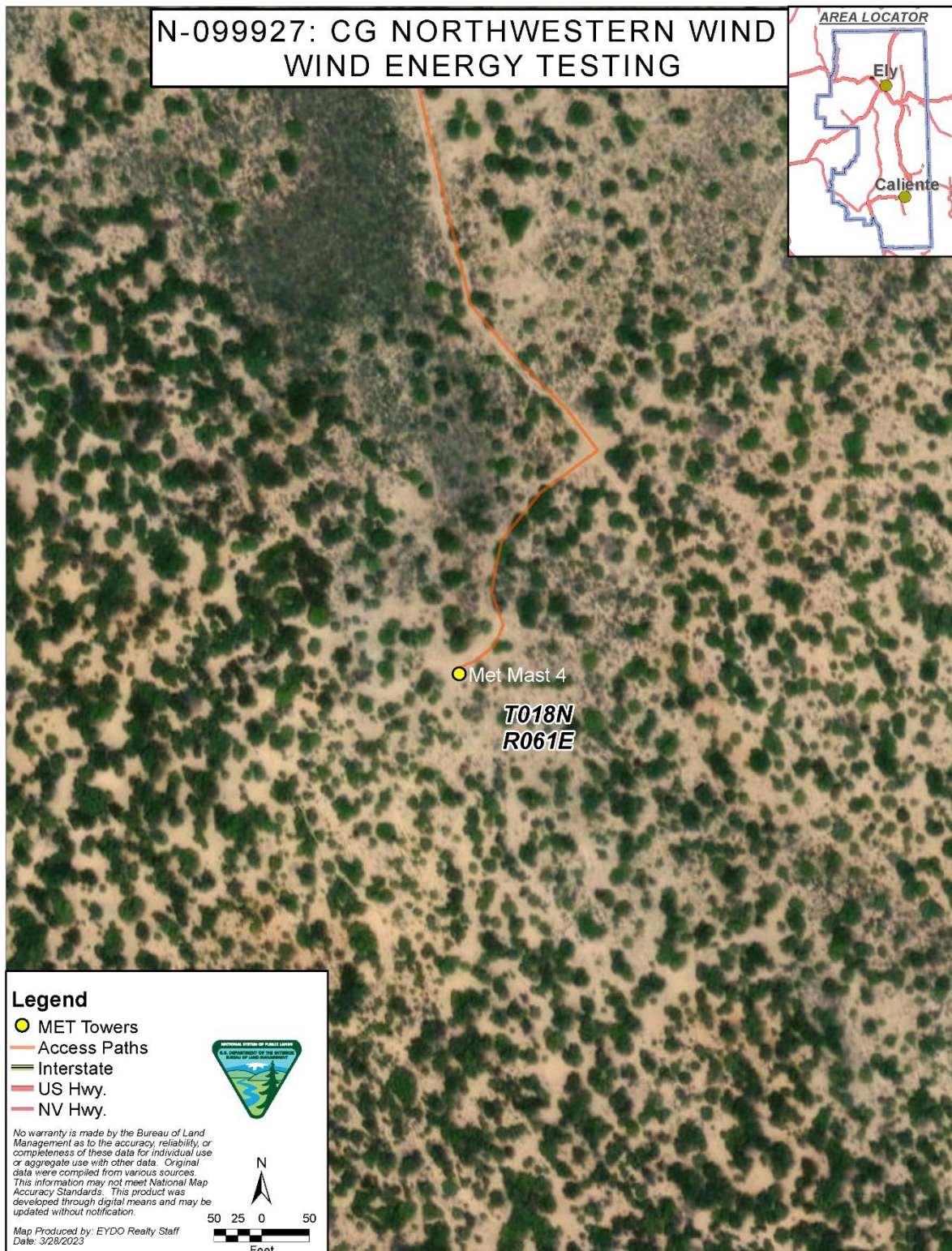
Map 4 Potential MET01 Tower Site



Map 5 Potential MET02 Tower Site



Map 6 Potential MET03 Tower Site



Map 7 Potential MET04 Tower Site



Map 9 Potential MET06 Tower Site

Appendix 2. Project Details



Figure 1 Solar Resource Assessment Unit



Figure 2 Solar Resource Assessment Unit & Albedometer

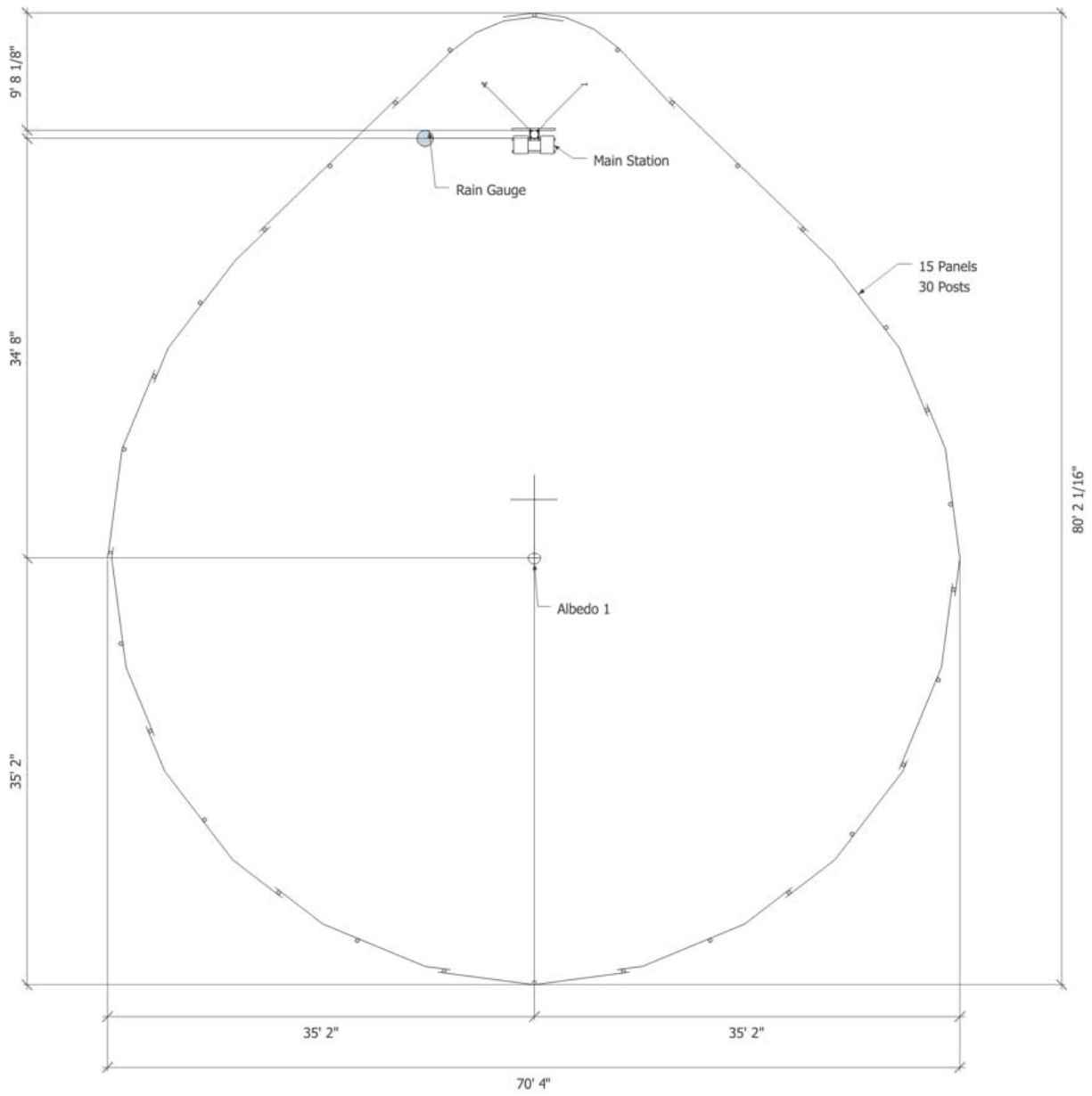


Figure 3 Solar Resource Assessment Unit Layout (Top-Down View)

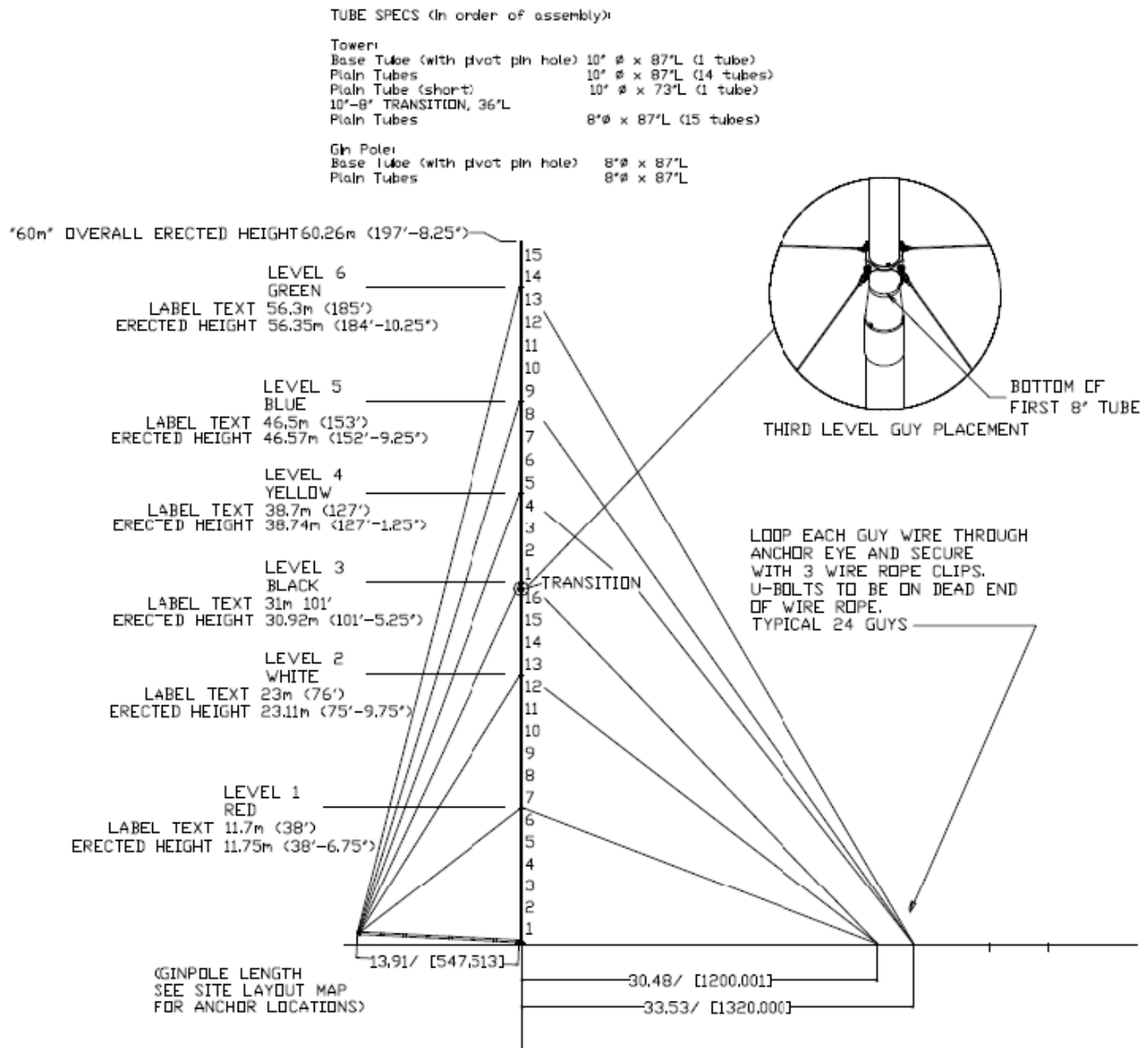


Figure 4 MET Tower Layout of 60 Meter Tower (Side-View)

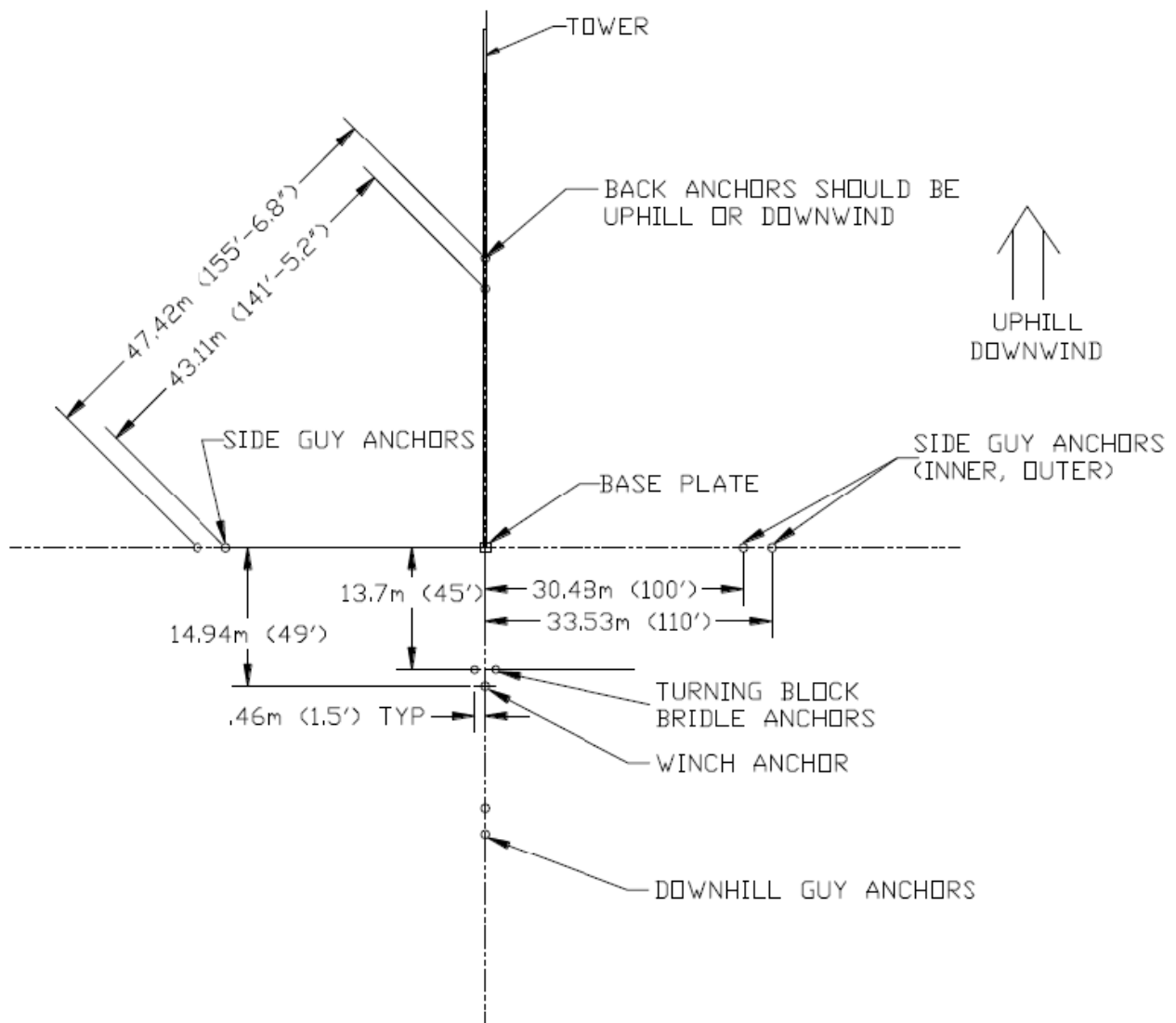


Figure 5 MET Tower Layout (Top-Down View)



Figure 6 Typical 60M MET Tower with Marker Balls



Figure 7 Typical 60M MET Tower Base



Figure 8 Typical 60M MET Tower Guy Wire Ground Anchors



Figure 9 Remote Sensing Device (LIDAR) with Trailer



Figure 10 Remote Sensing Device (LIDAR) with Trailer and earth anchoring T-posts

Appendix 3. Extraordinary Circumstances Documentation

BLM National NEPA Register #:	DOI-BLM-NV-L060-2023-0008-CX
Date:	August 17, 2023

The action has been reviewed to determine if any of the following extraordinary circumstances listed under 43 CFR 46.215 apply.

Impacts on Public Health and Safety

1. Does the proposed action have significant impacts on public health and safety?		
YES	NO	Rational
	x	The Proposed Action would not have significant impacts on public health or safety. The towers would be guyed to manufacturer specifications with the area around the base and anchor points fenced off.

Impacts on Natural Resources or Unique Geographic Characteristics

2. Does the proposed action have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness or wilderness study areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds (Executive Order 13186); and other ecologically significant or critical areas?		
YES	NO	Rational
	X	The Proposed Action is in Greater Sage-grouse General (GHMA) Habitat Management Area, which consists of nesting, early brood-rearing, late brood-rearing, and winter seasonal habitats. Early and late brood-rearing seasonal restrictions would apply. Nest clearance searches would be conducted if project occurs during the migratory bird

Level of Controversy

3. Does the proposed action have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)]?		
YES	NO	Rational
	x	The Proposed Action would have no known controversial environmental effects or unresolved conflicts.

Highly Uncertain or Unique or Unknown Environmental Risks

4. Does the proposed action have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		
YES	NO	Rational
	X	The Proposed Action would not pose any highly uncertain and potentially significant environmental effects, nor would it involve unique or unknown environmental risks.

Precedent Setting

5. Does the proposed action establish a precedent for future action, or represent a decision in principle about future actions, with potentially significant environmental effects?		
YES	NO	Rational
	x	The Proposed Action would not establish a precedent for future actions. All future similar actions would be subject to the same NEPA standards.

Cumulatively Significant Effects

6. Does the proposed action have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		
YES	NO	Rational
	x	Neither individual nor cumulative impacts affecting the environment are anticipated by authorizing the Proposed Action. The towers would be installed for three years for wind testing. Then removed with rehabilitation performed at each site.

Impacts on Cultural Properties

7. Does the proposed action have significant impacts on properties listed or eligible for listing, on the National Register of Historic Places as determined by either the Bureau or office?		
YES	NO	Rational
	x	There are no properties listed or eligible for listing on the National Register of Historic Places in the Project area. A BLM archaeologist inspected the Project area, and no further cultural work is required.

Impacts on Federally Listed Species or Critical Habitat

8. Does the proposed action have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?		
YES	NO	Rational
	x	The monarch butterfly is a Candidate species that has a low potential to occur within the area. Impacts to individual butterflies is unlikely and milkweed would be avoided.

Compliance with Laws

9. Does the proposed action violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment?		
YES	NO	Rational
	x	The Proposed Action would not violate any laws.

Environmental Justice

10. Does the proposed action have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		
YES	NO	Rational
	x	The Proposed Action would not pose adverse effects on low income or minority populations.

Indian Sacred Sites

11. Does the proposed action limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners, or significantly adversely affects the physical integrity of such sacred sites (Executive Order 13007)?		
YES	NO	Rational
	x	The Proposed Action would not limit access to, prevent ceremonial use of, or affect the physical integrity of sites protected by EO 13007.

Noxious and Non-Native Invasive Species

12. Does the proposed action contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area, or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		
YES	NO	Rationale
	x	Best Management Practices regarding the control of noxious weeds from the Ely Resource Management Plan would be implemented to preclude actions that may promote the introduction, growth, or expansion of the range of noxious weeds or non-native invasive species. A Weed Risk Assessment (WRA) was completed by a BLM biologist on 12/05/2022.