

Variance Request Form



Company: Avangrid Renewables
 Address: 1125 NW Couch Street, Suite 700
 City, State, Zip : Portland, OR, 97209

Variance: VAR- 010
 Request No.: Rev 0
 Date Submit: 03/29/2017
 Date Agency Received: _____
 Agency Reference No.: _____

Request Prepared by: Kamber McAllister (ICF)
 Spread/Location (Milepost): N/A
 Alignment Sheet/Sta. No.:
 Landowner: BLM
 Current Land Use/Vegetative Cover: Big Sagebrush Scrub, Disturbed Habitat,
 Open Coast Live Oak Woodland,
 Redshank Chaparral, Semi Desert
 Chaparral, Semi Desert Chaparral, Upper
 Sonoran Subshrub Scrub

Net Acreage Affected: 0.93
 Tract No.: N/A
 In or Within 50ft of a Wetland: Yes No
 Within 50ft of a Water Body: Yes No

Nearby Features (Water body, T&E Habitat, Wetlands, Noxious Weed): Waters are included on Figure 3.

Area, Residence, Cultural Resource Site (distance, etc.):

Variance Level: Level 1 Level 2 Level 3 (To Be Assigned by Designated Representative)
 Variance From: Permit Plan/Procedure Specification Drawing Mitigation Measure Other

Detailed Description of Variance:	Attachments <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Photos? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Variance 10 (VAR-010) includes additional areas needed for constructability and safety associated with travel along McCain Valley Road near the Lark Canyon Campground and OHV staging area near and within existing and new environmentally sensitive areas (Attachment A, Figures 1 and 2).

A new ESA was discovered on February 21, 2017. At the time of discovery of the work to widen McCain Valley road near this resource was halted and an ESA was established. To avoid impacting this ESA, the widening of McCain Valley Road needs to be shifted to the south. Additionally, an existing ESA was enlarged, extending north along McCain Valley Road on February 15, 2017. At the time of discovery, work in that area was halted and the expanded ESA was established. Since the discovery of the expansion, the area within the ESA has been re-evaluated by engineering and it has been determined that the road surface needs to be widened to 20' and associated construction disturbance limits established.

Shifting of McCain Valley Road impacts between stations [REDACTED] (Site 1):

VAR-010 shifts the permitted disturbance to McCain Valley Road south between stations [REDACTED] to completely avoid a new ESA discovered on February 21, 2017 (Figure 2). The current approved plan included widening the road surface width to 20' in this location, utilizing additional space on either side of the road for the widening (see IFC drawings issued 11.11.16 page 21). In addition to the road, the area also contains a culvert with a jurisdictional waterway. The re-alignment shifts the culvert further south than what is depicted in the approved engineering drawings. However, the shifted alignment limits the impacts to the jurisdictional waters within USACE, CDFW, and CSWRCB permit authorizations to that which was already permitted; thus no permit amendment will be sought from these agencies. The culvert extension is proposed on the south side of the road only, thus causing a new impact to a previously known ESA at the south edge of the permitted limits of disturbance. This would result in approximately 18,998 SF (0.436 acres) of additional impact to the project with approximately 89SF (0.002 acres) of impact within the existing ESA. This is depicted on the confidential mapset submitted as a supplement to this variance.

Widening McCain Valley Road between stations [REDACTED] (Site 2):

VAR-010 widens McCain Valley road to a minimum surface width of 20' throughout the project. Due to the slope of the adjacent land, and need to address runoff drainage through the area, additional earthwork beyond the road surface will be required to accommodate a 20' stable driving surface and associated clearing for construction and delivery vehicles (Figure 2). Although the clearing width varies in this ESA, at its widest location [REDACTED] the width of clearing is approximately 46'. The average width of clearing through this ESA is approximately 42'. The widening of McCain Valley Road in this ESA is approximately 9,495 SF (0.218 acres) and the associated widening outside of this ESA is approximately 11,913 SF (0.274 acres).

For turbine tower sections, the widest trailer is 10' from outside of wheel to outside of wheel. In addition, some of the components extend wider than the trailer with the widest component, the base tower section, being 15' wide. Trucks carrying blades will be approximately 145' in length with an additional 36' blade overhang. These represent the largest dimensions the roadways will need to accommodate, but are subject to change by the transport carriers as their exact fleet equipment have not been finalized at this time.

The re-design in this area has tried to balance cut and fill on both sides of the road under the assumption that the probability of finding new cultural remains directly adjacent to either side of the road is less than shifting widening impacts all to one side.

Variance Justification:

VAR-010 is required to complete construction of the Tule Wind Project safely. This variance has taken into account opportunities for reductions in area disturbance while balancing economic viability and constructability. Other engineering options were reviewed and found to be unviable due to large impacts to the ESA or too narrow passage to safely deliver turbines.

Shifting of McCain Valley Road impacts between stations [REDACTED] (Site 1):

At this location, jurisdictional waters run through one existing and one new ESA as well as the existing culvert within McCain Valley Road. The approved plan included a culvert extension to the north side of the road to avoid impacts to a known ESA to the south. The newly located ESA to the north of the road presented a greater need for avoidance than the ESA to the south. To accommodate safe vehicle travel from the steep slope to the east and entering into a turn at the base, a 20' wide drivable surface must be constructed and maintained throughout this location. Because of the need to extend the culvert beyond the 20' wide surface, we are requesting a variance to widen the road to the south and maintain the functionality of the culvert.

Widening McCain Valley Road between stations [REDACTED] (Site 2):

Widening to 20 feet in this location is required for constructability and safety. Within the ESA, there are multiple constraints including large adjacent rocks, steep up-slopes on the east side of the road, steep drop slopes along the western side of the road, a gradual right-hand turn, and a narrow road surface where the road bisects an existing jurisdictional channel with a culvert. These features create a safety hazard that increases the potential for a vehicle roll-over or scraping the natural rock wall along inside turn slopes.

During pre-construction engineering, it was anticipated that the road through this ESA had a 15'-16' wide driving surface (see IFC drawings issued 11.11.16, page 23 and 24). Upon surveyed inspection, as a result of the recent cease of construction activities in the area, the road within the newly enlarged ESA was found to be narrower in several pinch point locations. For example, in the new portion of this ESA McCain Valley Road narrows down at the existing culvert crossing to a width of 12.5' at station [REDACTED]. Additionally, the southern portion of the ESA has a 14.5' drivable surface width with a 2:1 down slope on the west side and an upslope on the east side. Both of these create safety hazards for vehicles carrying a 15' wide load and leave very little room for drivers' variability in steering through the reverse curves going uphill.



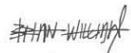
The reverse curves at the south approach to the ESA pose initial difficulty with maneuvering the longest components (blades), and the widest components (base tower sections), and necessitates that close proximity slopes on the east side of the road be cut back to provide adequate clearance, as shown in a cross section figure included in the confidential mapset submitted as a supplement to this variance. Additionally, fill on the west side of the slope needs to be sufficient to stabilize the road. To accommodate the heavy components, the roadway will need to be widened to 20', matching the rest of the project. Our engineer recommends that a maximum 2:1 slope be built in this location to minimize impacts while still supporting the heavy transport vehicles. Truck/trailer gross vehicle loads as high as 246,500 pounds will travel along McCain Valley Road and then onto the turbine access roads.

In addition to safety and constructability, the increase in road width (and associated cut and fill) is needed to manage traffic in this central portion of the project. Although pull-offs are designed just north and south of the ESA, the volume of traffic, both construction and public, would create congestion, further exasperating the safety concerns.

For Avangrid Renewables Use Only

Additional Surveys Required	Surveyed Corridor Description	Additional Surveys Completed
Cultural Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The variance is within existing cultural and biological resources survey areas, so additional surveys were not required. Supplemental confidential reporting associated with the cultural ESAs is being submitted separately.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
T & E Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Report Document Survey:

Sign-Off (as appropriate)	Name (print)	Approval Signature	Conditions (see attached)
Avangrid Permit Manager	Kristen Goland		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Lead Environmental Inspector	Talia Haley		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Designated Biologist	James Hickman	N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Cultural Resource Specialist	Brian Williams		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

For BLM Project Manager or Compliance Contact Use Only

Variance Approved: Variance Denied: Date:

Signature:

For Compliance Manager and Monitor Use Only

Variance Approved: Variance Denied: Date:

Signature:

Stipulations:

Spread:

Variance Request No.:

VARIANCE CONDITIONS

Name:

Title:

Organization:

Conditions:

Name:

Title:

Organization:

Conditions:

Name:

Title:

Organization:

Conditions: