

## Visual Simulations

# KOP002 The Buttes - Hwy 287

Late Afternoon

GE 3.0MW



## Rail Tie Wind Project

### Simulation Data

#### Photograph Information

|                                  |                             |
|----------------------------------|-----------------------------|
| Photo Name                       | 200508_DSC_0534_MIN_Sim.JPG |
| Date of Photograph               | 09/25/19                    |
| Time of Photograph               | 5:02 PM                     |
| Latitude                         | 41.160938°                  |
| Longitude                        | -105.577750°                |
| Ground Elevation + Tripod Height | 2248m                       |
| Photograph Settings              | ISO 200 1/400sec. f/10      |

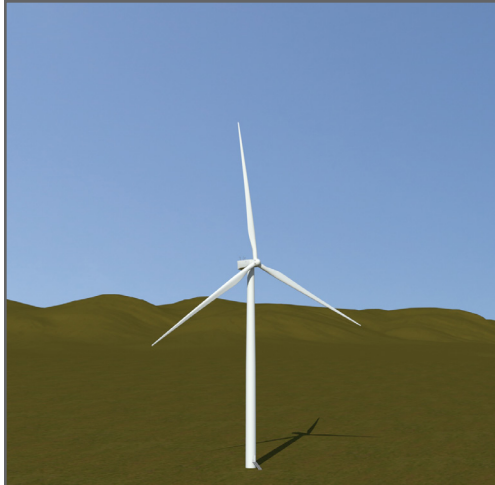
#### Camera Specifications

|                              |                            |
|------------------------------|----------------------------|
| Camera Make and Model        | Nikon D90                  |
| Sensor Size                  | Nikon APS-C (23.6x15.8mm)  |
| Lens Make and Model          | AF-S DX NIKKOR 35mm f/1.8G |
| Lens Focal Length            | 35mm prime                 |
| 35mm Equivalent Focal Length | 53.55mm                    |

#### Sun and Weather Information

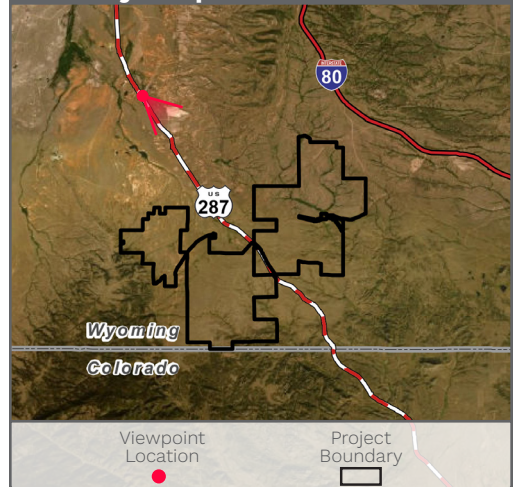
|                    |               |
|--------------------|---------------|
| Sun Angle/Azimuth  | 249°          |
| Sun Elevation      | 20°           |
| Weather Conditions | Partly Cloudy |

### Wind Turbine Information



|                        |          |
|------------------------|----------|
| Number of Turbines     | 149      |
| Make and Model         | GE 3.0MW |
| Upper Blade Tip Height | 152.5m   |
| Lower Blade Tip Height | 31m      |
| Indicative Hub Height  | 89m      |
| Rotor Diameter         | 127m     |

### Vicinity Map



### Viewing Instructions

The single-frame simulation on the following page should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

### Panoramic Existing Condition



### Panoramic Simulated Condition







**KOP002 The Buttes - Hwy 287**  
**Late Afternoon, viewing Southeast**

GE 3.0MW, Minimum Turbine Height Scenario



## Visual Simulations

# KOP002 The Buttes - Hwy 287

Late Afternoon

Vestas V162-5.6MW



## Rail Tie Wind Project

### Simulation Data

#### Photograph Information

|                                  |                             |
|----------------------------------|-----------------------------|
| Photo Name                       | 191130_DSC_0534_MAX_Sim.JPG |
| Date of Photograph               | 09/25/19                    |
| Time of Photograph               | 5:02 PM                     |
| Latitude                         | 41.160938°                  |
| Longitude                        | -105.577750°                |
| Ground Elevation + Tripod Height | 2248m                       |
| Photograph Settings              | ISO 200 1/400sec. f/10      |

#### Camera Specifications

|                              |                            |
|------------------------------|----------------------------|
| Camera Make and Model        | Nikon D90                  |
| Sensor Size                  | Nikon APS-C (23.6x15.8mm)  |
| Lens Make and Model          | AF-S DX NIKKOR 35mm f/1.8G |
| Lens Focal Length            | 35mm prime                 |
| 35mm Equivalent Focal Length | 53.55mm                    |

#### Sun and Weather Information

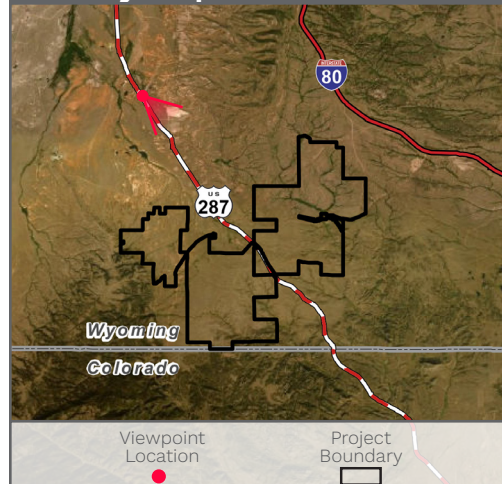
|                    |               |
|--------------------|---------------|
| Sun Angle/Azimuth  | 249°          |
| Sun Elevation      | 20°           |
| Weather Conditions | Partly Cloudy |

### Wind Turbine Information



|                        |                   |
|------------------------|-------------------|
| Number of Turbines     | 87                |
| Make and Model         | Vestas V162-5.6MW |
| Upper Blade Tip Height | 206m              |
| Lower Blade Tip Height | 44m               |
| Indicative Hub Height  | 125m              |
| Rotor Diameter         | 162m              |

### Vicinity Map



### Viewing Instructions

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### Panoramic Existing Condition



### Panoramic Simulated Condition







**KOP002 The Buttes - Hwy 287**

**Late Afternoon, viewing Southeast**

Vestas V162-5.6MW, Maximum Turbine Height Scenario