

# Chokecherry and Sierra Madre Wind Energy Project



## Frequently Asked Questions

- Q1. What is the purpose of this Environmental Impact Statement (EIS)?
- A1. To analyze and disclose the effects of a proposal to develop wind energy within the jurisdiction of the BLM Rawlins Field Office to the public, cooperating agencies, and interested public groups and agencies. The EIS will analyze the impacts of issuing rights-of-way for a wind energy project and ancillary facilities (consisting of access roads, electric power gathering cables, an electric transmission line, and electric substations). The EIS will address the proposed action and a range of reasonable alternatives including the no action.
- Q2. Will the public have an opportunity to participate in EIS process?
- A2. Absolutely. The EIS is being prepared in accordance with applicable National Environmental Policy Act (NEPA) requirements. The NEPA process provides numerous opportunities for public review and comment. By regulation, there are two stages in the EIS process to participate; during the scoping period and during public review of the EIS. However, the BLM encourages active participation throughout project development. To ensure that you are informed about opportunities to participate throughout project, please verify that your address is on the project mailing list by contacting Heather Nino, Realty Specialist, Bureau of Land Management, Rawlins Field Office, (307) 328-4270 or email [WYMail\\_PCW\\_Windfarm@blm.gov](mailto:WYMail_PCW_Windfarm@blm.gov).
- Q3. How is wind energy captured?
- A3. Wind turbines, like aircraft propeller blades, turn in the moving air and power an electric generator that supplies an electric current. Modern wind turbines are horizontal-axis variety, like the traditional farm windmills used for pumping water. Wind turbines are often grouped together into a single power plant, also known as a wind farm and generate bulk electric power. Electricity from the turbines is fed into a utility grid and distributed to customers just as it is with conventional power plants (<http://windeis.anl.gov/faq/index.cfm>).
- Q4. What are the advantages of wind-generated electricity?
- A4. Wind energy is a free, renewable resource, so no matter how much is used today, there will still be the same supply in the future. Wind energy is also a source of clean, non-polluting, electricity. Unlike conventional power plants, wind farms emit no air pollutants or greenhouse gases (<http://windeis.anl.gov/faq>).

- Q5. Are there drawbacks to using wind energy?
- A5. The major challenge to using wind as a source of power is that it is intermittent and does not always blow when electricity is needed. Wind cannot be stored and not all winds can be harnessed to meet the timing of electricity demands. Further, good wind sites are often located in remote locations far from areas of electric power demand (such as cities). Wind resource development may compete with other land uses, and those uses may be more highly valued than electricity generation (<http://windeis.anl.gov/faq>).
- Q6. Are there environmental problems facing wind power?
- A6. Although wind farms have relatively little impact on the environment compared to fossil fuel power plants, there is concern over impact to wildlife habitat, noise produced by the rotor blades, visual impacts, and bird and bat mortality. Most of these problems have been resolved or greatly reduced through technological development or by properly siting wind farms (<http://windeis.anl.gov/faq/index.cfm>).
- Q7. Are wind turbines noisy?
- A7. Most turbine noise is masked by the sound of the wind itself, and the turbines run only when the wind blows. In recent years, engineers have made design changes to reduce the noise from wind turbines. As wind turbines become more efficient, more of the wind is converted into rotational torque and less into acoustic noise. Additionally, proper siting and insulating materials can be used to minimize noise impacts (<http://windeis.anl.gov/guide/concern/index.cfm>).
- Q8. How can visual impacts be reduced?
- A8. Proper siting decisions can help to avoid any aesthetic impacts to the landscape. One strategy being used to partially reduce visual impacts is to site fewer turbines at any one location by using multiple locations and by using more efficient models of wind turbines (<http://windeis.anl.gov/guide/concern/index.cfm>). Also, painting the most visible turbines and structures to blend in color with the horizon could help reduce visual impacts to the landscape.
- Q9. Are wind turbines hazardous to birds and bats?
- A9. Wind turbines can cause harm to birds and bats through collision, most likely with the turbine blades. The likelihood of bird and bat fatalities is a function of species presence, abundance, behavioral characteristics, vegetation, topography, and the type of wind energy facility. Among bird species, migrating passerines and raptors are the most common fatalities at wind power facilities. Among bats, migratory tree-roosting species appear to be the most susceptible. Fatalities may have greater detrimental effects on bats and raptor populations because of their longer life spans and low reproductive rates.

The construction and maintenance of wind power facilities alter the landscape, which can lead to direct habitat loss and habitat fragmentation for some species resulting from displacement.

The wind industry and government agencies have sponsored research into bird and bat collisions with wind turbines, relevant bird and bat behavior, mitigation measures, and study design protocols (<http://windeis.anl.gov/faq>).

Q10. Do wind turbines pose a safety hazard?

A10. Unlike most other generation technologies, wind turbines do not use combustion to generate electricity, and hence do not produce air emissions. The only potentially toxic or hazardous materials are relatively small amounts of lubricating oils and hydraulic and insulating fluids. Therefore, contamination of surface or groundwater or soils is highly unlikely. Like all electrical generating facilities, wind generators produce electric and magnetic fields (<http://windeis.anl.gov/faq>).

Q11. What are the economic benefits of the project?

A11. Carbon County, the City of Rawlins, and other local public entities could realize long-term economic benefits from the project. The project would generate ad valorem/property taxes for the County and other taxing jurisdictions in which new facilities are located. The local business community would realize economic benefits in the form of sales revenues for businesses and sales, and use and lodging taxes for businesses serving construction crews and the operating work force following construction. Although the local labor market is already tight due to ongoing oil and gas development, the anticipated scale and multi-year construction program for the project may encourage out-of-state employment that would establish residency in the area. Additionally, the scale of the project could provide the basis for other local job training and other wind power related education opportunities. Completion of the project is likely to be tied to investments in transmission line capacity in the surrounding area. The construction and subsequent operation of the transmission lines would also result in ad valorem taxes, sales taxes, and use and lodging tax revenues within the region. Finally, the BLM would receive monies on behalf of the taxpayer for right-of-way fees.

Q12. How are megawatts (MW) determined? Is 2,000 MW the amount of electricity produced in an hour, a day, a week?

A12. A watt is a unit of measurement for rate of electrical energy use at a moment in time. A 100-watt light bulb uses 100 watts of energy, therefore it will consume 100 watt hours (Wh) when on for one hour. A desktop computer consumes approximately 65 watts of energy; therefore it will consume 1,560 Wh per day if left on for 24 hours (65 watts x 24 hours).

Q13. Who pays for the damage done to highways and roads by the big, heavy trucks bringing in the towers and turbines during construction?

- A13. Highways and roads are typically maintained and repaired by the entity (city, county, state, federal) having jurisdiction. Special mitigation where required is dealt with by the project proponent and the appropriate entity.
- Q14. Why not just swap land sections with the BLM and put this all on “private land” so the taxpayers don’t have to pay for any of it?
- A14. The proposed project is located partially on federal land and partially on private land. An opportunity to exchange lands so that the project could be developed on private lands would be attractive; however, a successful land swap could take years and may not be possible. In addition, placing the project solely on private lands would deprive the federal government of the revenue stream created through the royalty on the power generated from federal lands. The taxpayer does not have to pay for anything. All monetary costs associated with the project, including the project management, environmental analysis (including the salaries and expenses of the federal employees assigned to the project), permitting, development, and construction are paid or reimbursed by the project proponent.
- Q15. How much of the power will go to local communities; will our utility rates go down?
- A15. The power from this project will be integrated into the electrical grid and distributed. Local communities will not necessarily receive power from this project and it is unlikely that any local utility rates will be impacted.
- Q16. How big is a section of land (public or private) in the “checkerboard?” Can more than one wind turbine be sited in a section, if so, how many and how far apart do they need to be?
- A16. A section (640 acres) may provide room for up to sixteen turbines, however, turbine location and spacing is dependant on many factors including wind speed, terrain, turbine manufacturer, and site productivity.
- Q17. Can we still hunt on BLM land if there is a wind turbine on it?
- A17. There are no regulations prohibiting hunting on BLM lands that accommodate wind towers. However, please keep in mind that in all instances you must have permission to enter adjacent private lands, or cross private lands to access BLM lands that may accommodate wind towers.
- Q18. How close to the ground do the blades come?
- A18. This depends on terrain and turbine design; however, in most applications the turbine blades will come no closer than 50 to 75 feet above ground level.