

## 3.8 PUBLIC SERVICES

### 3.8.1 Introduction

A range of public services in Harney County could potentially be affected by the construction and operation of the proposed Project. This section presents a brief evaluation of public service impacts. The analysis of community service effects includes the following services: law enforcement, fire protection, schools and education, and health care services, as the Project would be more closely associated with these services. Public services considered but not evaluated include water and wastewater services, trash and waste disposal, and utilities. The nature of the Project would not demand these public services. Any of these latter services would be provided either off-site or maintained and removed by the Project developer.

### 3.8.2 Methodology

The methodology for analyzing impacts includes evaluating conditions and potential occurrences requiring the attention and responses of public service providers. The information is compiled from various sources including the Harney County Chamber of Commerce (HCC, n.d.), Harney County government, Harney District Hospital, and personal communications with local Bureau of Land Management staff, and a representative from Crane Rangeland Fire Protection Association.

The analysis was informed by comments from the public scoping process which occurred from July to September, 2009. Comments from agency representatives, local organizations and private citizens requested that the following issues be addressed with regards to public services:

- Housing needs for Project employees.
- Wastewater and garbage disposal for Project crews.
- Potential effects to school enrollment.
- Potential for vandalism of transmission lines.

### 3.8.3 Affected Environment

For the purposes of this discussion, the physical affected environment includes Harney County, Oregon. The proposed Project would be located in an area susceptible to wildfires and potential vandalism, which could increase the demands placed on both fire management and law enforcement in the area. Potential increased demands on both education and health care services are also examined.

#### 3.8.3.1 Wildfire Protection Services

The Burns Interagency Fire Zone (BIFZ) provides range and wildfire protection services for the public lands in Harney County, including BLM, USFWS, USFS, and Oregon Department of Forestry land. BIFZ fire equipment includes bulldozers, helicopters, a single engine tanker and heavy and light fire trucks, as well as staff to operate the equipment.

Private lands in the Project Area are covered by Crane Rangeland Fire Protection Association (RFPA), which is staffed entirely with volunteers. Rangeland fire protection associations are authorized by the Oregon Legislature to fill a gap in protection for portions of the state that are not located within a rural fire protection district or a forest protection district. Some areas within the Project Area may have dual protection for wild land fires (both BIFZ and Crane RFPA) and there is a mutual aid agreement between the two organizations.

Crane RFPA equipment includes approximately 10 tanker trucks, primarily retired trucks from the Department of Forestry, and several personal pickup trucks outfitted with 100 to 250 gallon tanks (depending on the size of the pickup truck) and hose reels. They currently have more tanks available than pickup trucks (J Dorroh, pers. comm., 2009).

While there are no responders in Harney County specifically assigned to infrastructure fires (e.g. transmission lines or towers), most fires that begin as an electrical fire would quickly become a wildfire, in which case the BIFZ would respond on public lands and Crane RFPA would respond on private lands. The BIFZ's role in such an event would entail suppressing the wildfire and protecting the rest of the infrastructure from wildfire, as best as possible. The BIFZ however is not trained to provide electrical fire suppression to the infrastructure, and that portion of the fire would be allowed to go out on its own, or would already be gone by the time the first responders arrived on the scene (D. Ridenhour, pers. comm., 2009).

Crane RFPA has about 200 members, with annual dues ranging between \$50 and \$100 per year, depending on other outside donations. Association members receive services for free, and non-members receive a bill based on both man-hours and the number of trucks required to suppress the fire. The RFPA tanker trucks are located on various members' land throughout the RFPA service area for easier access (J Dorroh, pers. comm., 2009).

### 3.8.3.2 Law Enforcement Services

Law enforcement in unincorporated Harney County is provided by the Harney County Sheriff's Office, which consists of a sheriff and three deputy officers. Both Burns and Hines have their own police departments. The Burns Police Department includes a chief and four patrolmen, while the Hines Police Department has a chief, a patrolman, and reserves. Further the Oregon State Police (OSP) has a local force consisting of a sergeant, two traffic officers, and two game officers. BLM and MNWR have law enforcement officers who enforce federal regulations on federal lands. The Burns Paiute Reservation also has its own police force (HCC, n.d.).

### 3.8.3.3 Educational Services

Ten separate school districts provide public education in Harney County, with Harney Educational Services District (ESD) providing many specialized services to all of these school districts. There are schools scattered throughout the county, with some located in the population centers of Burns and Hines, while other one- and two-room schools are located in the rural remote areas within Harney County (HCC, n.d.).

### 3.8.3.4 Health Care and Emergency Response Services

Harney District Hospital in Burns, serves the entire county, with a capacity of 25 beds. It offers a full spectrum of services, many offered locally and others by visiting providers. Ambulance services, including AirLink Critical Care from Bend and Life Flight from Boise for patients requiring helicopter or aircraft transportation, and other emergency medical services are also provided by the Harney District Hospital (HDH, n.d.; Small & Rural Hospital Summit 2009). Harney County Sheriff's Office also has a search and rescue component (Harney County Sheriff 2010).

## 3.8.4 Environmental Consequences and Mitigation

Potential impacts during construction arise primarily from the presence of the construction workforce and equipment in the region. During operations, public service effects are based on the size of the operations workforce and indirect employment in the region, as well as the operating requirements of the transmission line. The Project Area is located in a region susceptible to large-scale wildfires. The biggest two risks of fire

for the transmission line right-of-way (ROW) and the Echanis wind power generation facility are catastrophic failure of transmission line and wind power equipment and lightning strikes.

The potential effects on public services during the short-term construction phase and the long-term operational phase of the Project are described below. It should be noted that a variety of project design features and best management practices to reduce the effects on public services, from both the Echanis project and the transmission line alternatives, would be implemented as part of proposed action. These measures are not repeated in the mitigation sections below, but are summarized in Chapter 2 and listed in Appendix A.

### **3.8.4.1 Alternative A – No Action**

Under the No Action Alternative, there would be no increase in the demand for public services. Demand for services would be affected by population and development trends that are independent and unrelated to the proposed Project.

### **3.8.4.2 Echanis Project Effects Common to All Action Alternatives**

The Echanis Wind Energy Project would involve the construction and operation of 40 to 69 wind turbines on a 10,500 acre privately owned site in rural Harney County. The proposed wind turbines would be arranged in multiple “strings” placed along several exposed ridgelines on the site. The Project would include several miles of 34.5-kV underground power collection cables to connect the turbine strings to a new 100-foot by 200-foot substation located near the center of the site. A 24-foot by 48-foot operations and maintenance (O&M) building would be located next to the substation. An existing access road that currently connects the site to Ham Brown Lane and South Diamond Lane would be widened, improved, and extended to the new substation on the site. The existing access road is located exclusively on private property and would be improved with the knowledge and consent of the underlying land owners. Additional service roads would be located on the site to provide access between the operations and maintenance building, wind turbines, and other wind energy related facilities on the site.

#### **PERMANENT EFFECTS**

Operation and maintenance, including the necessary vegetation management would involve increased activity along the line by employees and contractors, slightly increasing the potential for fire. No additional permanent BLM or USFWS staff would be required. No additional personnel or equipment would be required for fire protection services with the addition of the Project. There is no notable permanent effect to wildfire protection services.

The incidence of vandalism of the wind farm facilities is expected to be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. To limit new or improved recreationist accessibility into areas, all new service roads not required for maintenance would be closed as appropriate and in coordination with the BLM or USFWS Authorized Officer. Further, the temporary relocation of non-local construction and operational professionals is not expected to increase unlawful behavior in Harney County. Therefore, no additional law enforcement demands are expected to be generated by the Project.

During the operational phase an increased need for emergency and health care services is unlikely. The existing emergency services are expected to be adequate to meet the demands.

#### **TEMPORARY EFFECTS**

During the construction period for the Project the weather could be hot and dry, with increased danger of fire. At such times the potential for fire is high. The potential could increase even more with the increased use of

vehicles and other motorized equipment. The addition of construction workers in the area is another source of increased fire danger. During the fire season, certain construction activities would be either restricted or prohibited, which could limit the timing of those construction activities. This Project would be subject to state, county, and federally enforced laws, ordinances, rules, and regulations that pertain to prevention and suppression of wildfires. Temporary effects to wildfire protection services could occur if sparks from equipment used during construction ignite. The Project applicant proposes several project design features (PDFs) to reduce these potential fire hazards, which are described in Appendix A.

Approximately one-quarter (around 25 employees) of the Echanis construction staff is expected to be local hires. The non-local construction workforce for the Project is not expected to relocate with their families, so the number of school-aged children in the area is not expected to increase during construction. There are no notable permanent or temporary effects to school and educational services.

During the operational phase an increased need for emergency and health care services is unlikely, but during construction there could be an increased need for emergency and health care services in the event of an injury accident. However, as accidents are assumed infrequent, the existing emergency services are expected to be adequate to meet any slight additional demands.

Overall, the effect of the Project on community services would be minimal. Implementation of the proposed PDFs described in Appendix A would further reduce effects of the Project.

### 3.8.4.3 Alternative B – West Route (Proposed Action)

#### PERMANENT EFFECTS

Operation and maintenance, including the necessary vegetation management would involve increased activity along the line by employees and contractors, slightly increasing the potential for fire. Effects would be minimal however, as the West Route would have managed vegetation and adequate vehicular access, as long as the developer continues to maintain the vegetation within the ROW and the access and service roads. No additional permanent BLM or USFWS staff would be required. No additional personnel or equipment would be required for fire protection services with the addition of the Project. There is no notable permanent effect to wildfire protection services under this alternative.

The incidence of vandalism of the transmission lines is expected to be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. To limit new or improved recreationist accessibility into areas, all new service roads not required for maintenance would be closed as appropriate and in coordination with the BLM or USFWS Authorized Officer. No additional law enforcement demands are expected to be generated by the Project during the operational phase. Permanent effects would be minimal.

There are no notable permanent effects to school and educational services.

During the operational phase an increased need for emergency and health care services is unlikely. The existing emergency services are expected to be adequate to meet the demands.

#### TEMPORARY EFFECTS

During the construction period for the Project the weather could be hot and dry, with increased danger of fire. At such times the potential for fire is high. The potential could increase even more with the increased use of vehicles and other motorized equipment. The addition of construction workers in the area is another source of increased fire danger. During the fire season, as determined by the State of Oregon, certain construction activities would be either restricted or prohibited, which could limit the timing of those construction activities.

This Project would be subject to state, county, and federally enforced laws, ordinances, rules, and regulations that pertain to prevention and suppression of wildfires. Temporary effects to wildfire protection services could occur if sparks from equipment used during construction of the transmission line, access roads, interconnection stations, and substation made contact with combustible material. The Project applicant proposes several PDFs to reduce these potential fire hazards, which are described in Appendix A.

The incidence of vandalism to the transmission lines is expected to be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. To limit new or improved recreationist accessibility into areas, all new service roads not required for maintenance would be closed as appropriate and in coordination with the BLM or USFWS Authorized Officer. Further, the temporary relocation of non-local construction professionals is not expected to increase unlawful behavior in Harney County. Therefore, no additional law enforcement demands are expected to be generated by the Project during the construction phase.

Approximately one-half (around 50 employees) of the transmission line construction staff is expected to be local hires (Kane/Norling, pers. comm.). The non-local construction workforce for the Project is not expected to relocate with their families, so the number of school-aged children in the area is not expected to increase during construction.

During construction there could be an increased need for emergency and health care services in the event of an injury accident. However, as accidents are assumed infrequent, the existing emergency services are expected to be adequate to meet any slight additional demands.

Overall, the effect of the Project on community services would be minimal. Implementation of the proposed PDFs described in Appendix A would further reduce effects of the Project.

#### **FUTURE CONSTRUCTION PHASE – UPGRADE TO 230-KV**

The upgrade of the initial single-circuit transmission line to a full double-circuit 230-kV transmission line would require a second construction phase at a future date when additional capacity is required on the transmission line. During the second construction phase, temporary construction related effects would be the same as those described above, where the overall effect of the Project on community services would be minimal, and implementation of the proposed PDFs described in Appendix A would further reduce effects of the Project.

#### ***South Diamond Lane Route Option***

The effects for this option are the same as discussed in Alternative B – West Route, including the future construction phase to upgrade to a 230-kV transmission line. Implementation of the proposed PDFs described in Appendix A would further reduce effects of the Project.

#### ***Hog Wallow Route Option***

The effects for this option are the same as discussed in Alternative B – West Route, including the future construction phase to upgrade to a 230-kV transmission line. Implementation of the proposed PDFs described in Appendix A would further reduce effects of the Project.

#### ***115-kV Transmission Line Option***

The 115-kV Transmission Line Option would be a reduced capacity design configuration constructed along the same transmission line alignments described above for Alternative B – West Route and the South

Diamond Lane and Hog Wallow Route Options. The only difference between the 115-kV Transmission Line Option and the others described above is the full build-out of this design option would have one 115-kV 3-conductor circuit instead of two. The line location, pole heights, pole spacing, ROW widths, construction methods, interconnection points, and access requirements would be the same as for Alternative B and the two route options described above.

#### PERMANENT AND TEMPORARY EFFECTS

The permanent and temporary effects of this design option would be similar to Alternative B. The only notable differences between this design option and others is this option would not require a second round of construction to add an additional 230-kV circuit, nor would equipment upgrades be required at the interconnection station adjacent to the HEC line. This option would have lower overall temporary construction related effects such as potentially increased emergency services needs (fire, medical, police) due to the presence of workers and equipment. Ongoing operations and maintenance activities would be the same as described for Alternative B. Implementation of the proposed PDFs described in Appendix A would further reduce effects of the Project.

#### 3.8.4.4 Alternative C – North Route

The effects for this option would be similar to those discussed for Alternative B – West Route, except that more construction workers on site for Alternative C could slightly increase the demand for public services such as law enforcement and fire protection, in comparison to Alternative B – West Route.

#### PERMANENT EFFECTS

Operation and maintenance, including the necessary vegetation management, would involve increased activity along the line by employees and contractors, slightly increasing the potential for fire compared to Existing Conditions. Alternative C – North Route would require more poles than the Alternative B – West Route and a second, parallel, north-south transmission line. Although these additional project components could slightly increase the potential for increases in demand for public services, such as law enforcement and fire protection, effects are expected to be similar to with Alternative B – West Route. Effects would be minimal and there would be no notable permanent effect to wildfire protection services under this alternative.

The incidence of vandalism of the transmission lines is expected to be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. No additional law enforcement demands are expected.

There are no notable permanent effects to school and educational services.

During the operational phase an increased need for emergency and health care services is unlikely. The existing emergency services are expected to be adequate to meet the demands.

#### TEMPORARY EFFECTS

During the construction period the potential for fire is expected to be high. The potential could increase even more with the increased use of vehicles and other motorized equipment. The addition of construction workers in the area is another source of increased fire danger. During the fire season, as determined by the State of Oregon, certain construction activities would be either restricted or prohibited, which could limit the timing of those construction activities. This Project would be subject to state, county, and federally enforced laws, ordinances, rules, and regulations that pertain to prevention and suppression of wildfires. Temporary effects to wildfire protection services could occur if sparks from equipment used during construction of the transmission line, access roads, interconnection stations, and substation made contact with combustible

material. The Project applicant proposes several PDFs to reduce these potential fire hazards, which are described in Appendix A.

The incidence of vandalism of the transmission lines is expected to be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. No additional law enforcement demands are expected to be generated by the Project during the construction phase.

The temporary effects of the Project on education and school services would be minimal, as construction would bring a short-term increase in population, few of which are likely to be school-age children. Approximately one-half (around 50 employees) of the transmission line construction staff is expected to be local hires (Kane/Norling, pers. comm.). The non-local construction workforce for the Project is not expected to relocate with their families, so the number of school-aged children in the area is not expected to increase during construction.

During construction there could be an increased need for emergency and health care services in the event of an injury accident. However, as accidents are assumed infrequent, the existing emergency services are expected to be adequate to meet any slight additional demands.

Overall, the effect of the Project on community services would be minimal. Implementation of the proposed PDFs described in Appendix A would further reduce effects of the Project.

#### FUTURE CONSTRUCTION PHASE – UPGRADE TO 230-KV

The upgrade of the initial single-circuit transmission line to a full double-circuit 230-kV transmission line would require a second construction phase at a future date when additional capacity is required on the transmission line. During the second construction phase, similar temporary construction related effects would be experienced as described above, where the overall effect of the Project on community services would be minimal, and implementation of the proposed PDFs described in Appendix A.

#### *115-kV Transmission Line Option*

The only difference between the 115-kV Transmission Line Option and Alternative C described above is that the full build-out of this design option would have one 115-kV 3-conductor circuit instead of two. The line location, pole heights, pole spacing, ROW widths, construction methods, interconnection points, and access requirements would be the same as for Alternative B and the two route options described above.

#### PERMANENT AND TEMPORARY EFFECTS

The permanent and temporary effects of this design option would be similar to Alternative C. The only notable differences between this design option and others is that this option would not require a second round of construction to add an additional 230-kV circuit, nor would equipment upgrades be required at the interconnection station adjacent to the HEC line. This option would have lower overall temporary construction related effects such as potentially increased emergency services needs (fire, medical, police) due to the presence of workers and equipment. Ongoing operations and maintenance activities would be the same as described for Alternative C. Implementation of the proposed PDFs described in Appendix A would further reduce effects of the Project.

#### **3.8.4.5 Residual Effects after Mitigation**

There would be no anticipated residual effects to public services after mitigation measure have been implemented.

3.8.4.6 Summary Comparison of Alternatives

The effect to public services from development of the Echanis wind development, primary access road, and each alternative is summarized in Table 3.8-1.

**Table 3.8-1 Summary of Effects – Public Services**

|  | Alternative A   |   | Alternative B   |                                     |                                     | Alternative C<br>North Route        |
|--|---|---|---|-------------------------------------|-------------------------------------|-------------------------------------|
|  | No Action   | Echanis   | West Route<br>(Proposed Action)   | S. Diamond Lane<br>Route Option     | Hog Wallow<br>Route Option          |                                     |
| <b>Wildfire Protection Services</b>                | No increase in demand anticipated.<br><br>Demand would be affected by population and development trends that are independent and unrelated to the proposed Project. | Increased use of vehicles and other motorized equipment during hot dry weather could increase the risk of fire. | Increased risk of fire during construction when weather is hot and dry. | Same as Alternative B - West Route. | Same as Alternative B - West Route. | Same as Alternative B - West Route. |
| <b>Law Enforcement Services</b>                    | Same as above.  | No effect   | No effect   | No effect                           | No effect                           | No effect                           |
| <b>Educational Services</b>                        | Same as above.  | No effect   | No effect   | No effect                           | No effect                           | No effect                           |
| <b>Health Care and Emergency Response Services</b> | Same as above.  | No effect   | No effect   | No effect                           | No effect                           | No effect                           |