3.5 AGRICULTURAL CROPS AND LIVESTOCK

3.5.1 Existing Conditions

As described in Section 3.1, 'Earth' and in Section 3.10, ‘Land Use’, land uses in the Project area are predominantly open space and livestock (cows, horses and sheep) grazing. There is currently no agricultural activity taking place on any of the parcels where Project facilities are proposed, other than grazing. None of the land is irrigated and no crops are grown on these parcels, which are designated as open range by Kittitas County. Due to low precipitation, this area is not highly productive rangeland, and most grazing use is seasonal (spring) in nature. The vegetation in the Project area, as described and assessed in detail in Section 3.4, 'Vegetation and Wetlands', is dominated by native shrub steppe species, but invasive species are present in some areas, particularly those areas near existing roads and around springs.

The Project site and lands designated for the BPA feeder line are owned by Washington DNR, Washington DFW, and one private landowner. The parcels along the PSE transmission feeder line are owned by six landowners. To the west of the Project area and BPA transmission lines in areas served by the Highline canal, irrigated agriculture predominates.

3.5.2 Impacts of the Proposed Action

3.5.2.1 Construction

During construction of the Project, it will be necessary to remove livestock from those areas where blasting or heavy equipment operations are taking place. The Applicant will make arrangements with the property owner and livestock owner(s) to keep livestock out of these areas during those periods. The entire construction period is expected to last less than one year, so the impact on grazing operations will be limited to one grazing season. The area that will be temporarily disturbed during construction is approximately 360 acres. This temporarily disturbed area will be replanted after construction with an appropriate native seed mix and is expected to recover over time, particularly given that disturbance corridors are largely linear in nature. As described in Section 3.4, 'Vegetation and Wetlands', an active noxious weed control program will be implemented, in consultation with the Kittitas County Noxious Weed Control Board during both construction and operations to effectively prevent and minimize the introduction and/or spread of invasive species.

3.5.2.2 Operation

Once the Project is completed, grazing activities can resume as before. The operation of wind turbines is highly compatible with grazing activities. Cattle, horses, sheep, and other domestic animals routinely graze underneath operating wind turbines at projects

across the U.S. and around the world. Most of the Project facilities will be located within a roughly 25,000 acre privately-owned ranch. The entire Project area encompasses approximately 8,600 acres. The total footprint area that will be permanently occupied by the Project facilities is approximately 165 acres. The access trails serving the transmission feeder line(s) will remain accessible for grazing.

It is not known at the present time whether or not grazing will continue within the Project area. For the parcels owned by WDNR, that decision will rest with WDNR. The parcel owned by WDFW is not currently leased for grazing. Following an exercise of the Applicant's purchase option, the Applicant would control the affected land, and has not determined whether grazing leases will be renewed. Continuation of grazing leases on the Applicant's property would not constitute granting public access to the Project area as only the lessee's agents would be permitted to enter the property.

Figure 3.5.2-1 Elk Herd Migrating near Blue Canyon Wind Farm, Oklahoma 2004

The Applicant has determined that grazing activities will be discontinued in an area that will be used for habitat mitigation. Section 27 (T 18 N, R 21 E) has been proposed for use as mitigation acreage and would be excluded from grazing, in accordance with the WDFW's guidelines for wind power development.

Assuming cattle grazing continues on adjacent parcels, the Applicant would install approximately 9,800 feet of new fencing along portions of the northern, western and southern boundaries of Section 27 during the construction timeframe. To the extent

practical, existing fencing along the northern and eastern boundaries of Section 27 would remain in place. When completed, the fence will exclude livestock from the section in order to enhance its value as wildlife habitat. The specific height and material used for new fencing will be determined in consultation with WDFW to allow wildlife to cross over into this area.

In the event that cattle grazing is discontinued entirely on the private lands within the Project boundary, approximately 5,300 acres of grazing land would be removed from production for the life of the Project (at least 20 years). The removal of approximately 5,300 acres of land from the approximately 445,000 acres of pasture or unimproved grazing land in Kittitas County (Kittitas County Comprehensive Plan, 2003) would represent a reduction of approximately 1.2%. This Section 'Agricultural Crops and Livestock' contains additional details addressing grazing, and Section 3.10, 'Land Use' addresses zoning details.

The current holder of the grazing lease for the privately owned land within the Project area resides in Grant County and transports livestock a considerable distance to graze the area. It is not known what the lessee's plans would be if livestock are displaced from the Project area, however, any livestock grazing that are displaced from the Project area may be shifted to graze on the remaining 20,000 acres of the privately owned ranch that surrounds the Project area or to other privately-owned or WDNR-owned land in the area that is available for grazing.

The possibility for operation of the Project to displace wintering elk is discussed in Section 3.6, 'Wildlife'. It is not known for certain if the human disturbance associated with Project operations will displace significant numbers of elk, however, it appears unlikely given that the site is presently used regularly by hunters and other recreational users. Currently at the Blue Canyon Wind Farm, a similar wind power project operating in Oklahoma and shown in Figure 3.5.2-1, preliminary study appears to indicate that there is very little impact on the migrating elk herds which habitually graze across the project area. The Applicant has agreed to allow controlled hunting within the Project area in order to allow management of the elk and deer populations and to prevent creation of a sanctuary effect that could lead to greater agricultural damage claims from farmers and ranchers in the area.

3.5.2.3 Comparison of Impacts of Proposed Scenarios

The difference in temporarily and permanently disturbed acreages is presented in Table 3.5.2-1 below. The primary difference between the proposed scenarios, as applicable to this section, is the difference in temporarily disturbed area which will be re-seeded.

Table 3.5.2.1 Difference in Project Disturbance Areas Under Different Scenarios

	Large WTG Scenario	Most Likely Scenario	Small WTG Scenario
Project Temporary Disturbance Area	289 acres	356 acres	401 acres
Project Permanent Disturbance Area	164.7 acres	164.7 acres	164.6 acres

3.5.3 Impacts of the No Action Alternative

Under the No Action Alternative, the Project would not be constructed or operated, and the environmental impacts described in this section would not occur. The No Action Alternative assumes that future development would comply with existing zoning requirements for the Project area, which is zoned Commercial Agriculture and Forest and Range. According to the County's zoning code, the Commercial Agriculture zone is dominated by farming, ranching, and rural lifestyles, and permitted uses include residential, green houses and agricultural practices. Permitted uses in the Forest and Range zone include logging, mining, quarrying, and agricultural practices, as well as residential uses (Kittitas County 1991). However, if the proposed Project is not constructed, it is likely that the region's need for power would be addressed by user-end energy efficiency and conservation measures, by existing power generation sources, or by the development of new renewable and non-renewable generation sources. Baseload demand would likely be filled through expansion of existing, or development of new, thermal generation such as gas-fired combustion turbine technology. Such development could occur at conducive locations throughout the state of Washington.

A baseload natural gas-fired combustion turbine would have to generate 67 average MW of energy to replace an equivalent amount of power generated by the Project (204 MW at 33% net capacity). (An average MW or "aMW" is the average amount of energy supplied over a specified period of time, in contrast to "MW," which indicates the maximum or peak output [capacity] that can be supplied for a short period.) See Section 2.3, 'Alternatives'.

3.5.4 Mitigation Measures

As described in the preceding sections, the Applicant proposes to implement an active noxious weed control program to prevent and minimize the spread or introduction of noxious weeds in the Project area and to allow controlled hunting to avoid creating a sanctuary for elk and deer that may cause an increase in agricultural damage to neighboring landowners.

3.5.5 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to agricultural crops and livestock are expected as a result of the proposed Project.