Alberta Wilderness Association
"Defending Wild Alberta through Awareness and Action"

November 5, 2024

Laramide Transmission Line
Enfinite
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To Enfinite:

Alberta Wilderness Association (AWA) appreciates the opportunity to comment on the Laramide Battery Storage Project and the proposed transmission interconnection. Founded in 1965, AWA strives to help Albertans understand the intrinsic values that wildlife and wilderness provide and encourage communities to participate in conservation initiatives that will ensure a legacy for future generations. With over 7,500 members and supporters in Alberta and beyond, AWA is dedicated to conserving Alberta's wilderness and advocating for conservation strategies that protect Canada's biodiversity.

To reach the substation, the transmission lines must cross into Frank Lake IBA. Both overhead and underground installation of transmission lines have environmental impacts, which will need to be carefully considered and minimized. These environmental impacts must be considered with regard to the transmission lines and disturbances already present on the landscape, and total cumulative effects of additional transmission lines need to be discussed. Given the high use of the land by migrating birds, it is likely that an underground transmission will have smaller impacts to wildlife, although the disturbances from construction and installation will need to be managed and restored to reduce landscape impacts.

Frank Lake IBA is considered "the most important wetland in southwestern Alberta for breeding water birds"[1], and is recognized as a globally, continentally and nationally significant area for the large congregations of migrating and nesting bird species that frequent the area. This includes surveys showing 2.8% of the Trumpeter Swan population and 1.5% of Tundra Swans stage Frank Lake during migration, as well as thousands of ducks and shorebirds. Over 200 species have been recorded at the site, including at-risk species such as bank swallows, Sprague's pipit, horned grebe and ferruginous hawk[2]. As with other developments, we would recommend a 1000m setback for IBAs, otherwise, we expect that the best possible technologies and procedures are used to minimize environmental damage.

Overhead transmission lines are a particular hazard for birds, with transmission lines estimated to cause between 2.5 and 25 million bird deaths per year in Canada[3]. They were observed to be particularly harmful to grassland birds, more than roads and vehicular collisions. Common mitigation measures to

[1] IBA Canada. (n.d.) *Frank Lake (south) Site Summary.* Retrieved Oct 16 from: https://ibacanada.ca/site.jsp?siteID=AB079&seedet=Y&siteID=AB079&seedet=Y
[2] eBird. 2022. *Frank Lake (general location) Sightings.* Retrieved Oct 16 from: https://ebird.org/hotspot/L728322?yr=all&m=
[3] Martin, C. J., Bork, E. W., & Nielsen, S. E. (2022). Mortality of grassland birds increases with transmission lines. Avian Conservation & Ecology, 17(1).

reduce transmission line mortality include flagging or bird diverters, although the effectiveness of these methods remains uncertain, with one study suggesting their application can reduce collisions by roughly half, although this was acknowledged as a likely overestimate[4]. Considering the large populations of birds in the region, the installation of additional transmission lines is expected to have significant impact on migrating and breeding populations around Frank Lake.

Burying transmission lines is recommended to reduce bird collisions[5], and given the high bird and wildlife use of the region, we would suggest burying all transmission lines to reduce risk of collisions. Underground transmission lines also are safer, with a reduced risk of fire or electrocution. These transmission lines still have impacts, especially during construction, when soil disturbance will occur. This construction can temporarily displace wildlife, and construction should avoid the breeding and migration season to reduce impacts on bird populations. Efforts should also be made to restore the landscape to the original habitat, by using locally sourced seeds and native species. Particular care needs to be taken around the stream crossing, as construction and installation can introduce dust and particulate matter into the water, as well as other pollutants. Directional boring may reduce some impacts of construction, although we would like to see an environmental impact assessment on the impacts of proposed transmission line construction.

Thank you for considering our comments.

Sincerely,

ALBERTA WILDERNESS ASSOCIATION

Ruiping Luo

Ruiping Luo
Conservation Specialist

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[4] Bernardino, J., Martins, R.C., Bispo, R. and Moreira, F., 2019. *Re-assessing the effectiveness of wire-marking to mitigate bird collisions with power lines: A meta-analysis and guidelines for field studies.* Journal of Environmental Management, 252, p.109651.
[5] Transmission Lines and Birds. 2020. National Audubon Society. Retrieved November 1, 2024 from: https://www.audubon.org/news/transmission-lines-and-birds

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