RMA
RURAL MUNICIPALITIES of ALBERTA

Agriculture First Initiative for Renewable Energy

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Introduction

Alberta Agriculture and Irrigation (AGI) is consulting on policy development to align with new direction to prioritize agricultural land as it relates to renewable energy development. The Rural Municipalities of Alberta (RMA) represents Alberta's 69 municipal districts, counties, specialized municipalities, and the special areas board. RMA members provide local services to 85% of Alberta's land base, and as a result the majority of large-scale renewable energy projects occur within RMA member municipalities.

This submission will respond to the questions posed in AGI's questionnaire as well as introduce some additional considerations. The comments will be broken into sections that loosely align with question blocks in the questionnaire.

Municipal Policy and Renewable Energy on Agricultural Land

The impact of renewable energy projects on municipalities varies throughout their lifecycle. During construction and decommissioning there are relatively short periods of significant traffic on municipal roads. However, during the operation phase the impact on municipal infrastructure will likely be minimal. The challenges faced during high traffic periods may be addressed through road use agreements with the operator.

With regards to municipal taxes, typically the renewable energy plant operator will lease land from a landowner and be assessed and taxed directly. However, if that company does not pay their taxes, the landowner could be responsible for unpaid taxes. This is not a scenario municipalities want to encounter, and could be partially addressed by requiring reclamation securities being tied to the land, and not the company. This would provide an option for the landowner in the situation where the operator becomes insolvent.

A land use consideration not included in the questionnaire that should be included is the impact of transmission infrastructure on adjacent landowners and how it interacts with municipal land use planning. While the approval of transmission infrastructure has historically been considered out of scope for siting renewable energy projects, it should be considered as part of this discussion as transmission infrastructure can have significant impacts on municipal planning and on agricultural land.

Coexistence of Agriculture and Renewable Energy

The coexistence of agriculture and renewable energy production on the same piece of land may be feasible in some scenarios, but unlikely in others. For example, wind turbines can likely co-exist with crop or livestock production without significant reductions in agricultural production. However, solar power plants will have a significant impact on agricultural production. There are three elements missing from the questionnaire that should be considered:

1. It is foreseeable that in some situations the development of a renewable energy project will change the type of agricultural production. For example, moving from field crops to livestock. If this is the case, work must be undertaken to determine equivalencies of agricultural production. This would include determining a ratio of livestock units to acres of crop in production.
2. While specialized equipment exists to farm around tightly spaced solar panels, it is not realistic for the majority of farmers to adopt this new practice and purchase new equipment. Consideration for the practicality of coexistence must include a discussion of what will happen in practice versus what is technologically feasible.
3. AGI must determine what level of agricultural production must be met for a project to be considered to meet the principle of coexistence. It is unlikely that the land can produce 100% of its original production, however, the RMA suggests that a reasonably high level of production must be maintained to satisfy the

idea of coexistence. A piece of land producing only 20% of its pre-energy development cannot be said to be practicing coexistence.

Related to points 2 and 3 above is how land is used for both agriculture and renewable energy at the parcel level. Rather than seeking ways for agriculture and renewable energy to coexist on each square meter of the parcel, an alternative may be to consider parcels of land at a larger scale and use a portion of the parcel solely for agricultural purposes and the remainder used solely for renewable energy. This would allow for the land to continue in agricultural production without significant operational changes while allocating a certain area for energy production.

Land Use and Classification

The RMA agrees that Alberta's most productive agricultural land should be prioritized for food production. The RMA supports provincial policy that would see restrictions placed on where renewable energy projects can be located to preserve prime agricultural land. While the Land Suitability Rating System (LSRS) plays a role in determining agricultural productivity, other factors not included in the LSRS should be considered. AGI may need to consider using the LSRS in coordination with other factors such as the geographic spread of agricultural pests and weeds like Fusarium graminearum or glyphosate resistant kochia. These are not uniformly present across the province, and their presence can play a role in overall agricultural productivity. Additionally, it is not clear if the LSRS captures extreme weather risks such as hail and how that can impact production in a region.

With regards to treating the best available soil in a region the same as Class 1 or 2, the RMA is supportive. While the highest productivity agricultural land at a provincial scale should be prioritized for agricultural production, there is also a need to consider local impacts. Lower quality agricultural land may be a better fit for renewable energy projects, however, this should not justify large scale land conversion in regions without Class 1 or 2 soil.

Irrigability

The RMA supports the policy of restricting renewable energy development on irrigated lands or those lands with a potential to become irrigated. The use of irrigability assessments may be exempted in scenarios where the land is far from existing irrigation infrastructure, however, the determination of this distance should be calculated following a separate consultation.

Native Grasslands

The RMA supports policies that protect native grasslands as they provide important habitat and promote biodiversity. Large tracts of native grasslands also take pressure off agricultural lands as they provide ecosystem goods and services that satisfy government policy objectives, leaving agricultural land to prioritize food production. Building on this, promoting food production and biodiversity should be a greater priority than renewable energy production/electricity generation. In a hotter and drier climate more land will be required to produce the same amount of food. Therefore, agriculture and biodiversity values guide land use decisions, including on how to manage native grasslands.