

Attachment A-10:

Proposed Approach to Address Wind Energy Minimum Planning Requirements

On March 6, 2025, the Minister of Municipal Affairs and Housing made changes to the Minimum Planning Requirements (MPR) Regulations under Section 229 of the HRM Charter regarding wind turbines.

Regarding setbacks, the regulations state:

- 14 (1) *Any statement of policy included in a municipal planning strategy in accordance with clause 13(c) on the minimum setback required between a residential dwelling and a wind turbine, that is part of, or located within, an energy-generating facility with a production rating of 2 MW or greater, must not require a minimum setback larger than the greater of the following:*
- (a) *4 times the wind turbine height;*
 - (b) *the distance required to ensure that*
 - (i) *sound levels from the wind turbine do not exceed 40 dBA at the exterior of a residential dwelling, and*
 - (ii) *a residential dwelling receives less than 30 minutes per day or 30 hours per year of shadow flicker.*

The regulations provide a definition of wind turbine height for the purposes of interpreting subsection (1).

The requirements further state that the visual impact or aesthetic appearance of wind turbine developments is not a factor that Council may consider when approving projects.

Review:

Staff assessed the impact of these requirements on HRM's planning documents, including the Regional Municipal Planning Strategy (Regional Plan), Secondary Municipal Planning Strategies (SMPs), and Land Use By-Laws (LUBs). The proposed Regional Plan policy meets the MPR, which is a general enabling policy that does not specify setback dimensions and does not include requirements related to visual impact or aesthetic appearance.

The Regional Plan includes policies for establishing wind energy facility requirements across land use by-laws, creating three zones that allows the use of a wind turbine:

- **Urban Wind Zone (UW-1)**
- **Rural Wind Zone (RW-2)**
- **Restricted Zone (R)**

The land use by-laws further classify wind energy facilities based on production capacity and turbine height:

- **Micro Facility:** ≤10kW, ≤23m (75ft)
- **Small Facility:** 10-30kW, ≤35m (115ft)
- **Medium Facility:** 30-300kW, ≤60m (197ft)
- **Large Facility:** >300kW, >60m (197ft)

Each land use by-law includes general provisions for wind energy facilities, and if a specific zone was not applicable to an area (e.g., rural wind zones within the Regional Centre), it was excluded from the by-law.

Impact on Large Facilities Over 2MW:

The MPR requirements on wind turbine setbacks only affect Large Facilities (over 2MW) which are restricted to HRM's RW-2 zone. HRM's existing land use by-laws have setback requirements that currently state a minimum setback of 1000m from any habitable building on an adjacent property is required. This may exceed the new MPR's maximum allowable as described above. Preliminary industry research was conducted and it was found that the tallest wind turbine approved in Canada to date is 195m. This would make the maximum setback for a turbine of this size 780m (4x the height of the turbine). It is uncertain what impact this particular turbine would have on noise and flicker, however industry standards indicate that wind turbines generally produce 35-45 decibels at a 300m distance.

HRM's current 1000m minimum setback requirement likely exceeds the MPR issued in terms of minimum setbacks and sound levels. HRM does not currently regulate shadow flicker from wind turbines. To determine necessary amendments to our planning framework, it is anticipated that at a minimum, language on shadow flicker measurement will be required. Staff will need to engage with industry experts and communities to appropriately assess the necessary amendments to the setback requirements within the RW-2 zone. Further technical analysis to support amendments will help to ensure regulatory compliance moving forward.

At this time, staff anticipate amendments will be focused on the RW-2 zone within the relevant land use by-laws and that no amendments will be required to the Regional Plan or Secondary Municipal Planning Strategies (Community Plans).

Recommendations:

HRM's existing policies generally align with the new Provincial regulations, however amendments to setback requirements and shadow flicker provisions are anticipated to ensure full compliance with the new MPR regulations. Staff recommends proceeding with the following to address the most recent changes in the Minimum Planning Requirements:

Industry and Community Consultation

- Engage wind energy developers and industry experts to assess potential impacts of the new setback requirements and explore mitigation strategies.
- Publish information on the HRM website regarding the MPR and the proposed amendments and provide a comment period for the public to provide any comments.

Technical Analysis & Reporting

- Undertake further analysis on noise modeling and shadow flicker projections to support amendments and ensure regulatory compliance moving forward.

Amendments to Land Use By-Laws

- Amend land use by-laws as necessary to align the setback requirements for large wind energy facilities in the RW-2 zone with the new regulation's setback distance requirements.
- Land use by-law amendments will be presented to the applicable Community Councils for consideration and approval. A public hearing must be held before any amendments can be approved.