

## Bulletin 2019-09

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### **Interim information requirements for solar and wind energy power plant applications**

The Alberta Utilities Commission regulates electric facilities to ensure they are sited, constructed, altered, operated and decommissioned in a safe and environmentally responsible manner. The Commission regularly assesses its regulations, rules and processes to identify innovative and efficient regulatory solutions for Alberta, and also develops regulatory requirements for rising issues.

By way of Bulletin 2019-10, the Commission is initiating a review of AUC Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*. The goal of the review is to update and streamline existing requirements to make the application process more efficient for applicants, interveners and the AUC. As part of the review, the Commission wishes to standardize the assessments for both solar glint and glare and shadow flicker and better understand possible mitigation options to ensure the proper and safe development of solar and wind energy power plants in Alberta.

Solar glint and glare refers to a direct reflection of the sun in the surface of the photovoltaic solar panel. Generally, glint is a momentary flash of bright light while glare is a continuous source of bright light. Shadow flicker refers to the flickering effect caused when rotating wind turbine blades periodically cast shadows over neighbouring properties as they turn, through constrained openings such as windows.

Although the inclusion of a solar glare or a shadow flicker assessment is not currently required by Rule 007, most solar and wind energy project applications filed with the AUC include this information. The Commission's practice has been to request such assessments through information requests when they were not included in the original application. To avoid delays associated with filing an information request, and to improve efficiency, the AUC is imposing, by way of this bulletin, new interim information requirements for wind and solar energy projects. These new information requirements will apply to all new wind and solar energy Rule 007 applications filed on or after October 1, 2019.

### **Solar glare assessments**

Applicants for new solar energy projects must include a solar glare assessment in their Rule 007 application. The solar glare assessment must describe the time, location, duration and intensity of solar glare predicted to be caused by the project. It should also describe the potential impact upon dwellings and transportation routes surrounding the proposed solar energy project, and any mitigation measures proposed. Applicants are required to identify the software or tools used in their assessment, the assumptions of input parameters utilized, and the qualification of the person performing the assessment.

### **Shadow flicker assessments**

Applicants for new wind energy projects must include a shadow flicker assessment in their Rule 007 application. The shadow flicker assessment must describe the time, location and duration of the shadow flicker predicted to be caused by the project. It should also describe any potential impact upon residential and non-residential buildings surrounding the proposed wind energy project, and any mitigation measures proposed. Applicants are required to identify the software or tools used in its assessment, the assumptions of input parameters utilized, and the qualification of the person performing the assessment.

The Commission expects that filing the respective assessment as part of the application will eliminate the extra time and effort that an applicant would need in order to supplement its application, which in turn will contribute to the timely informational completeness of an application.

If you have questions with respect to this bulletin, please contact Wayne MacKenzie at 403-592-4420 or by email at [wayne.mackenzie@auc.ab.ca](mailto:wayne.mackenzie@auc.ab.ca), or Sophie Jiang at 403-592-4418 or by email at [sophie.jiang@auc.ab.ca](mailto:sophie.jiang@auc.ab.ca).

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