

Bulletin 2024-24

December 3, 2024

Suspension of post-construction monitoring requirements at applicable solar power plants for the 2025 season

As part of the approval process for solar power plants, approval holders are required to conduct at least three years of post-construction mortality surveys, in accordance with Section 3 of Rule 33: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*. If Alberta Environment and Protected Areas (AEPA) finds significant wildlife mortality and requires the approval holder to implement mitigation, then an additional two years of surveys are required to assess the effectiveness of the mitigation and ensure there is a reduced risk to wildlife.

The Alberta Utilities Commission (AUC) is temporarily suspending Section 3 of Rule 033 for operational solar power plants that are not located within 1,000 metres of a named lake or a wetland-based Important Bird Area (suspended facilities). The temporary suspension is effective beginning on January 1, 2025, and ending on December 31, 2025 (2025 season). This suspension does not apply to wind power plants.

Initial requirements for post-construction mortality surveys were determined relevant in 2016 when available science indicated wildlife mortality might be an issue at solar power plants. Since this time, AEPA has been gathering data to allow an Alberta-specific assessment of the risks solar power plants create for wildlife.

AEPA requested the temporary suspension to allow it to conduct a review of the province-wide post-construction wildlife mortality data and assess the risk to wildlife at solar power plants.

To date, some wildlife mortality has occurred at solar power plants but not to the level that has required AEPA to direct additional mitigations. The AUC is aware that post-construction mortality surveys are expensive to conduct and time consuming for AEPA and AUC staff to review.

AEPA advised that, following its analysis, it will identify recommended changes or updates to the solar directives, survey protocols, processes or requirements, and engage with the AUC on these recommendations. This includes whether the current data available provides enough evidence to assess the conservation value of mortality surveys, assessing the risk solar power plants present to wildlife populations in Alberta and potentially identifying adjustments to make the surveys more effective. AEPA submitted that its proposed analysis will include the results of post-construction monitoring surveys from the 2024 season.

Details on the temporary suspension and other important obligations on operators

The temporary suspension does not relieve approval holders for suspended facilities from their obligation to conduct post-construction mortality surveys for the full time conditioned in their approval. Rather, it is a one-year suspension for the 2025 season. For example, if a project has completed their second year of post-construction mortality surveys in 2024, then they should anticipate completing their third year of post-construction mortality surveys in 2026, following the one-year suspension. If there are any changes to the obligation for approval holders of suspended facilities to conduct their remaining years of post-construction mortality surveys, then the AUC will advise them before the end of the temporary suspension.

During the temporary suspension, approval holders of suspended facilities must nonetheless report any discovery of an unusual mortality event at a solar facility. An unusual mortality event means 10 or more deceased individuals (any combination of birds, mammals, amphibians or reptiles), found at any one time within an 800-metre radius of each other, within and immediately adjacent to the fenceline of a solar facility. If an unusual mortality event is discovered by any personnel, a qualified wildlife biologist should be contacted immediately to assist with data collection, as set out under Section 2.2.2 of the *Post-Construction Survey Protocols for Wind and Solar Energy Projects*. Additionally, approval holders must also report any discovered mortalities of species listed as “Threatened” or “Endangered” under Schedule 6 of the *Wildlife Regulation*.

The AUC emphasizes that the temporary suspension does not apply to solar power plants within 1,000 metres of a named lake or wetland-based Important Bird Area. This is because named lakes and wetland-based Important Bird Areas have typically been avoided to align with the *Wildlife Directive for Alberta Solar Energy Projects*, and these areas have higher relative bird populations. Therefore, a gap exists in Alberta’s post-construction mortality data which does not allow an accurate determination of whether an unreasonable risk to birds exists near named lakes or wetland-based Important Bird Areas.

For clarity, the meaning of a named lake and a wetland-based Important Bird Area in this bulletin has the same meaning as those terms in 100.1.8 and 200.1.1 of the *Wildlife Directive for Alberta Solar Energy Projects*.

Conclusion

The AUC considers AEPA’s request for a temporary suspension of Section 3 of Rule 033 to be reasonable in the circumstances. This suspension is consistent with the AUC’s practice of regularly assessing its regulations, rules and processes to identify innovative and efficient regulatory solutions for Alberta.

Specific inquiries about the suspension can be directed to Danielle Glover, Director – Gas Facilities and Technical Assessment, at danielle.glover@auc.ab.ca.

General stakeholder questions can be directed to info@auc.ab.ca.

Alberta Utilities Commission