

# Bulletin 2011-15

June 8, 2011

## AUC Rule 012 technical changes, second segment

The Alberta Utilities Commission (AUC or the Commission) has been working with stakeholders to conduct a review of AUC Rule 012: *Noise Control* (Rule 012) technical issues, with a view to assessing whether changes to certain provisions might be necessary or advisable. The review is being conducted in two segments. On March 29, 2011, the Commission approved changes to Rule 012 in relation to the first segment.

The second segment of the review will address technical issues that were deferred in the first segment. Technical review sessions will be held to receive input from participants. The AUC will issue this bulletin to participants from the first segment of the review, which will include acoustical practitioners, Alberta Environment (AENV), Alberta Energy, the National Energy Board (NEB) and the Energy Resources Conservation Board (ERCB). The AUC will also post this bulletin on its website. The AUC appreciates the continued participation of acoustical practitioners and these agencies in the review process, and encourages representatives from current and potential facility owners and the public to participate in the meetings.

The AUC will hold and facilitate three technical review sessions to receive input from participants on selected technical issues. The technical review session topics and schedule are summarized in Table 1.

Table 1 - Technical review session schedule

Session	Topics	Date	Time	Location
I	Wind turbines	Tuesday, June 28	9 a.m. – 4 p.m. (lunch provided)	AUC office Fifth Avenue Place Fourth Floor, 425- First St S.W., Calgary
II	1. Measurement method <sup>(a)</sup> 2. Modelling <sup>(a)</sup> 3. Ambient monitoring adjustment (A2 adjustment) 4. Rule 012 standard section 5. Low frequency noise (LFN)	Wednesday, June 29		
III	Outstanding topics from sessions I and II	Monday, July 4 (tentative)		

(a) Measurement methods and modelling issues associated with wind turbine noise will be discussed in Session I.

The issues associated with each technical topic are outlined in Appendix A. The AUC suggests that interested parties prepare their recommendations about the topics prior to the review sessions. To consider the technical issues, the AUC requests the participants to provide their recommendations in writing to the AUC following the technical review sessions.

Those wishing to participate in the technical sessions should notify Raymond Lee ([raymond.lee@auc.ab.ca](mailto:raymond.lee@auc.ab.ca)) by Friday, June 17, 2011. We recommend that one representative from each organization attend the technical review session.

The recommendations about issues in Appendix A should be emailed to Raymond Lee ([raymond.lee@auc.ab.ca](mailto:raymond.lee@auc.ab.ca)) by Friday, July 8, 2011.

Should you have questions relating to this consultation process, please contact Jonathan Chui ([jonathan.chui@auc.ab.ca](mailto:jonathan.chui@auc.ab.ca)). Questions related to the content of the Rule 012 should be directed to Jack Davis ([jack.davis@auc.ab.ca](mailto:jack.davis@auc.ab.ca)).

(Original signed by)

Robert D. Heggie  
Chief Executive

## Appendix A Summary of Technical Review Specific Issues

Topic	Issue #	Issue
Wind turbines	1	How to measure noise for compliance assessments: <ul style="list-style-type: none"> <li>• Separation of ambient noise and wind-turbine noise.</li> <li>• Acceptable wind speed range during measurement.</li> <li>• Height and location of wind speed measurement.</li> </ul>
	2	For predicting noise from wind turbines, does the rule need to specify the following: <ul style="list-style-type: none"> <li>• Environmental conditions (i.e. wind speed, direction, shelter belts, inversions, atmospheric stability).</li> <li>• Acoustic power of wind turbine (maximum or at a rated wind speed).</li> <li>• Acoustic model methodology and techniques.</li> </ul>
	3	Clarify how to predict noise to represent worst-case noise conditions.
Measurement Methods	1	There is inconsistency between isolation analysis used for ambient noise surveys (e.g. for an A2 adjustment) compared to isolation analysis used for comprehensive noise surveys. Is there a more precise (and consistent) means of isolation analysis that could be used?
	2	Is there a need to modify wind speed specified in Rule 012 Table 4 Favourable summertime weather conditions?
Modelling	1	Is it appropriate to adjust predicted noise by using wind statistical data (i.e. windrose)?
A2 Adjustment	1	Are any changes to AUC Rule 012, Table 1 needed? Clarify the situation where it would be correct to use A2 adjustment to the permissible sound level (PSL)? (i.e. urban environment)
Rule 012 Standard Section	1	Should Rule 012 contain a list of technical standard material, standards and protocol, or acronyms? If yes, does the current list (Rule 012 Appendix 7) need to be updated and expanded? Any suggested references to be included?
Low Frequency Noise	1	Section 4.2(1) requires determination of dBC* minus dBA* and identification of a tone. Is the two-part requirement necessary? Is there a concern about low frequency noise (LFN) that does not have tonality or tonality without LFN? If so how should it be determined, measured and managed?
	2	Evaluate the LFN cumulatively with consideration of the ambient dBC level?
	3	Is there a need to adopt a dBC noise threshold limit such as that used by other noise regulatory agencies?

\* As defined in Rule 012, Appendix 1- Glossary