

Electricity Framework Review Project Team Terms of Reference

Approved by the CASA Board on June 21, 2007

Background

At the March 2007 Board meeting, the CASA Board of Directors approved a Statement of Opportunity brought forward by Alberta Environment to begin a five year review of the *Emissions Management Framework for the Alberta Electricity Sector* as outlined in the Electricity Project Team (EPT) Report to Stakeholders (Nov 2003). The Framework includes recommendations related to:

- -stakeholder review at 5 year intervals,
- -emissions standards for new units,
- -emission requirements for existing units,
- -monitoring transparency and accountability,
- -continuous improvement,
- -renewable and alternative energy
- -energy efficiency and conservation and
- -response to potential hot spots

The Framework recommends that government undertake a multistakeholder review of Best Available Technology Economically Achievable and other related elements within the Framework during 2008. This includes a number of specific tasks set out in the recommendations.

As part of this review, it will be necessary to consider and document what has already been done to implement the Framework recommendations (e.g. recommendation 25)

Based on the importance of taking an integrated approach and recognizing the interconnection of air and greenhouse gas emissions, the project team should consider as appropriate and relevant, GHG issues in the 5 year review. The team should also be aware of the linkages of the review to GHG and other policy initiatives however, the review should not duplicate these other policy efforts, in particular for GHG, where existing processes are in place.

It will also be helpful to conduct a preliminary scoping of the information required to undertake the review to identify issues that require further information to be compiled and a more detailed analysis as part of the review.

Goal

Initial Scoping

The project team will conduct an initial scoping to determine which, if any of the below mentioned key task areas warrant a detailed review, and either recommend that no further work is necessary or undertake a detailed review of those areas and make recommendations on them. Related but out of scope issues will be identified as appropriate for awareness.

Review and update, if necessary, elements of the *Emissions Management Framework* for the Alberta Electricity Sector Report to Stakeholders as described in recommendation 29 and associated recommendations in the above report.

Key Task Areas

- Update specific air emissions standards for new electric power plants constructed after 2010. This includes emissions of nitrogen oxides, sulfur dioxide, mercury, particulate matter and GHG (on a unit specific basis)
 - Recommendation 25 should be included in relation to its application for new units post 2011.
 - This should consider the implications and requirements from other policies such as GHG regulation and the Canada-wide standards.
 - o The review of GHG does NOT include:
 - a review of offsets,
 - -targets for existing units,
 - -sectoral reduction targets or
 - -allocation of emissions between electricity and steam for cogeneration
- Review new information related to:
 - air emission substances subject to limits or formal management in Alberta or other jurisdictions and
 - possible new substances not yet regulated, but which should be considered based on potential impacts.
 - o Identify if further action is needed.
- Compile and review any new or additional information that illustrates potential health effects associated with emissions from the electricity sector and determine how any new information impacts the framework
- Review technologies to identify BATEA for the electricity sector including such aspects as generation, combustion efficiency, control technology, monitoring methodologies and air emission characteristics.
- Determine whether BATEA standards should prescribe emission limits or the installation of a particular technology.
- Review the source characterization exercise completed for the original Electricity Project Team and identify what, if any further action is needed. This will include completing the future substances review described in recommendation 71 to assess whether additional substances should be formally controlled based on new or emerging information.
- Review particulate matter management as per recommendation 22
- Review the use of reciprocating engines to determine if they should be considered as part of the framework (as per recommendation 12)
- Determine whether BATEA standards need to be set for other fuel types (including synthetic gas, bitumen etc.) and if so, what these standards will be.
- Collect and review relevant information on economic issues as per recommendation 35
- Collect and review relevant information on emissions as per recommendation 34
- Review continuous improvement reports submitted by industry and identify goals for further continuous improvement pursuant to recommendation 29.
- Review the proposed federal regulatory agenda for air emissions as it related to the Framework and make recommendations as appropriate.
- Make recommendations for future five year reviews.

Timelines

As set out in the EPT consensus report it was agreed that the Framework be reviewed at five year intervals by a multistakeholder group. The following timeline reflects that determined by the report and the CASA board. It is agreed that the review should be initiated in a timely fashion to enable completion by the agreed completion date for reporting. It was agreed that since this was a review of previous work done by a CASA team (i.e. not a new initiative) and that there is strong support by all the stakeholders to proceed, it can proceed in an efficient fashion.

June 2007 Report to CASAS Board on terms of reference Nov 2008 Final report to CASA board on findings of review

Membership

Membership on the project team will include all effected stakeholders. A notice will be provided to all previous Electricity Project Team members and their respective sectors to provide them with opportunity to participate in the project team and identify representatives.

It is suggested that the most efficient process may be to mirror the approach adopted by the EPT and establish a core team with potential for smaller task groups to tackle key topics.

The following are suggested project team members:

- Alberta Energy
- Alberta Energy and Utilities Board
- Alberta Environment
- Alberta Health and Wellness
- Canadian Chemical Producers Association
- Climate Change Central
- Electricity generators (including cogeneration)
- Environment Canada
- NGO from environmental groups, health groups and representatives of local communities concerned with electricity emissions, to be selected by AEN delegate selection process. It is anticipated that a minimum of 6 delegates from the three sectors will be selected.
- Oil and gas sector (reflecting any direct interest in emissions from the electricity sector)
- Power Purchase Arrangement Buyers

Budget

It is anticipated that consultants will be needed to gather background information on the following areas:

- Review of emissions standards in other jurisdictions,
- Source characterization,
- Review of environmental effects (including a literature review, scientific review and discussions with people working in the field),
- Literature review of health effects,
- Emission forecasts,
- Review of generation, combustion efficiency, emissions control and monitoring technology and

- Review of co-benefits in relation to PM and the additional substances list.

The information gathered may consist of new information and updated information on matters considered during the original Electricity Project Team report.

It is anticipated that the cost for consultants could be approximate \$200,000. This estimate is roughly one-half of the amount spent during the original Electricity Project Team report.

In addition to consultants there will be costs associated with writing and printing the report and per diems.