A CASA Working Group to Develop an Approach to Setting New Standards and Performance Expectations for Alberta's Electricity Generation Sector

A Statement of Opportunity

То

The Clean Air Strategic Alliance Board of Directors

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1. INTRODUCTION

Alberta's economy and industries are growing rapidly. With a number of large-scale energyintensive projects being proposed, there is a need to create certainty around government expectations concerning future environmental performance. Both industry and government recognize the need for such certainty and, to this end, the Alberta Government has determined that an approach will be developed to set new standards and performance expectations for Alberta's fossil-fuel intensive sectors.

The first phase of developing this approach will investigate measures and approaches that can be applied to reducing emissions-intensity associated with electricity generation within Alberta. It is intended that measures and approaches identified for the electricity generation sector will be able to be applied to other sectors at a future stage.

2. ELECTRICITY GENERATION IN ALBERTA

Alberta's competitive electricity market has encouraged new generation that is responsive to changes in supply and demand. Between 1998 and the end of 2000, approximately 1400 MW was added to the Alberta power supply and between 2001-2006 an additional 6600 MW is planned to be added with 660 MW of this being planned for 2001. Of the additional capacity added between 1998-2000, approximately 85% was cogeneration, with the remainder being mainly gas turbine and renewable energy sources such as wind and hydro. Similarly, of the nearly 6000 MW of generation planned between 2002-2006, approximately 34% is cogeneration, 41% coal and the remainder, natural gas and renewable sources (Alberta Energy, August 2001).

The key to meeting the desire of Albertans for reasonable power prices is increased electricity supply, and the government firmly believes that Albertans need ready access to an affordable, reliable supply of electricity. Alberta is committed to welcoming new development, in any industry, that benefits Albertans and that meets its environmental standards and other regulatory requirements.

The electricity generation sector is, however, a significant source of air emissions. As a sector, it accounts for around 20 % of the province's SO_2 emissions and around 25% of greenhouse gas emissions. Reviewing the emissions standards for the electricity and other fossil-fuel intensive sectors will assist the province in maintaining an appropriate level of environmental quality and addressing the issues associated with greenhouse gas emissions. In doing so, Alberta will be able to further capitalise on the opportunities afforded by its significant fossil-fuel wealth.

In developing new standards (and improving the overall efficiency of electricity generation), issues such as cost-effectiveness, fuel choice, investor certainty, and maintaining competitiveness within North America need to be addressed. Measures undertaken elsewhere may be investigated for their applicability in Alberta to ensure our industry is operating in a competitive and environmentally sustainable manner.

On June 15, 2001 the Alberta Government announced new emission standards for coal- fired plants in Alberta. Alberta Environment also announced that it would be developing a process, in consultation with the public and industry, to look at a new approach for standards for coal-fired plants approved after 2005. As part of this process, consideration will be given to the management of emissions from existing plants, and the possible introduction of emission standards for carbon dioxide management.

3. CLEAN AIR STRATEGIC ALLIANCES' KEY ROLE

The Alberta Government is proposing that the Clean Air Strategic Alliance (CASA) manage the process for developing the approach to new emission standards for the electricity generation sector.

The Clean Air Strategic Alliance was established by the Alberta Government to provide strategic advice on air quality management. It includes stakeholders representing major Alberta sectors-industry, municipalities, the federal government, and non-government organizations-as well as representatives of the Alberta Government Departments of Energy, Environment, and Health and Wellness. CASA operates on a consensus basis, which means that the Alberta Government participates in the process to ensure recommendations are consistent with policy objectives.

Subject to CASA approval, a multi-stakeholder working group will be formed which will develop terms of reference for approval by the CASA board. If the CASA board approves the terms of reference, it is intended that the process and recommendations to the CASA board will be completed by late 2002. This will enable government sufficient lead-time to incorporate any measures into its approvals process post 2005. It will also provide sufficient time for industry to incorporate any standards, measures, and approaches into its investment decisions.

As part of the process, the public will also be provided an opportunity to participate in the development of the final CASA recommendations to government.

A background paper (Appendix 1) outlines a range of issues and options that may be considered by CASA and should assist in developing the terms of reference for the working group. Appendix 2 provides a list of potential stakeholders.

A key consideration highlighted in the paper will be how this approach can be coordinated with other air quality management and greenhouse gas processes being undertaken provincially (including CASA), nationally, and internationally. Attention should be given to the most effective use of stakeholders' time and resources given these other processes.

4. RELATIONSHIP TO CASA'S BUSINESS PLAN

The proposed program fits well with CASA's core business functions, goals, and Key Focus Areas and in particular:

- Pollution Prevention/Continuous Improvement
- a working environment in which Pollution Prevention/Continuous Improvement is used to protect air quality
- Ecological Health
- prevention of adverse short or long term effects of air emissions on ecosystem health
- Socio Economic Integration
- optimize social, economic, and environmental benefits and minimize costs to Albertans
- effective use of limited resources
- decision-making sensitive to public opinion about air quality

5. **RECOMMENDATIONS**

It is recommended that:

- 1. A CASA working group be established to develop the process for looking at a new approach for setting standards and performance expectations for air emissions from Alberta's electricity generation sector. The process will recognize existing provincial and national processes that have been established for dealing with specific emissions.
- 2. All management options are considered.
- 3. The applicability of the measures and approaches identified to other sectors is a key consideration.
- 4. Subject to final government approval of the overall process, recommendations are made to the CASA board by late 2002.
- 5. The process not be used as a rationale for delaying the assessment of applications currently before regulatory agencies.