



**ALBERTA WILDERNESS ASSOCIATION**

*"Defending Wild Alberta through Awareness and Action"*

April 4, 2013

Linda Jones, Panel Manager  
Canadian Environmental Assessment Agency  
22nd Floor, 160 Elgin Street  
Ottawa ON K1A 0H3

Via Email: SiteCReview@ceaa-acee.gc.ca

**Comments on Adequacy of  
Site C Clean Energy Project Draft Environmental Impact Statement**

Dear Ms. Jones and CEAA Panel,  
Alberta Wilderness Association (AWA) appreciates the opportunity to provide comments on the adequacy of BC Hydro's Environmental Impact Statement for the Site C Clean Energy Project (the EIS).

AWA, founded in 1965, is an Alberta-based conservation group with 7,000 members and supporters in Alberta and around the world. We work towards the long-term protection of remaining representative large wilderness areas and other areas of special ecological significance in Alberta to sustain species diversity; conserving biodiversity is an important international obligation undertaken by Canada as a signatory to the Convention on Biological Diversity. We also work for better management of Alberta's watersheds to ensure future generations enjoy healthy aquatic ecosystems and the abundant, clean water they provide.

The Peace River watershed is a nationally significant waterway that supplies water to the Peace-Athabasca Delta, one of the largest freshwater deltas in the world. The Delta ecosystem has already been adversely affected by the Bennett Dam's reduction of the Peace River's replenishing floods. In Alberta, the Peace River contains a high species diversity of fish. Its valley provides key habitat for migratory birds and sensitive species including the threatened grizzly bear and amphibians and reptiles. Because of these interests, AWA offers the following comments regarding the adequacy of BC Hydro's EIS for the Site C Dam proposal.

Overall, BC Hydro has not adequately assessed the environmental effects of Site C. The following deficiencies in the EIS need to be addressed:

- **Insufficient analysis and area assessed for wildlife impacts**

The boundaries of the area assessed are too limited. As a result, the EIS omits assessment of regional impacts to species that range widely, occur at low densities and/or are unevenly distributed. Impacts need to be accounted for at a population scale that is relevant and appropriate to conservation planning for wide-ranging terrestrial and aquatic species. Impacts on the wolverine, lynx and the SARA-listed woodland caribou are virtually excluded from the Regional Assessment Area (RAA) analysis, and RAA analysis for fishers, grizzly bears and wolves is also cursory; these species need to receive more careful consideration about the cumulative effects of regional industrial disturbance on the quality and connectivity of their regional habitat. A sound cumulative effects assessment of impacts to these species should include past industrial impacts, including of existing Peace River dams, and reasonably foreseeable future impacts.

- **Insufficient assessment of downstream effects**

To be credible, the EIS must assess the downstream effects as far as the Peace-Athabasca Delta. Previous BC Hydro projects on the Peace River have already seriously interfered with natural flow regimes in the Peace-influenced part of the Delta. Currently, the EIS only describes downstream effects as far as Vermilion Chutes. To ensure *all* significant potential downstream effects are considered, the EIS must describe the current conditions and potential effects of the surface water regime, climate, fish and fish habitat, wildlife and vegetation to the Peace-Athabasca Delta.

- **Insufficient description of pre-industrial environment and cumulative industrial effects**

The EIS cumulative effects assessment appears to have omitted a number of past and potential future projects, including the impacts of the existing dams and reservoirs on the Peace River. Both federal and provincial laws require that the EIS include an assessment of the cumulative environmental effects of Site C in combination with the effects of past projects and activities in the area. The EIS should be amended to strengthen the analysis of the pre-industrial local and regional area, as well as the cumulative effects of previously-existing and reasonably foreseeable projects.

- **Insufficient threshold consideration for cumulative effects assessment**

The grizzly bear road density analysis study states (Part 7, p.173) "The Project will have relatively little long-term or permanent effect on overall road densities in the LAA. The majority of the changes in road density due to the Project will involve increases in road density in areas that are already over the 1.2 km/km<sup>2</sup> threshold and are thus unlikely to be used by grizzly bears." EIS section 14.6.3 states in part: "It should be noted that BC Hydro is not the lone organization contributing to the decline in wildlife resources, as many of the other projects or industries mentioned above also contribute to the overall decline." These two statements suggest science-based thresholds for industrial impacts to wildlife populations have already been exceeded, beyond which new industrial disturbance should not proceed. The EIS should provide more information on science-based threshold values for wildlife, particularly for species at risk and for wide-ranging carnivores, and whether they are at or near exceedance levels at both a local and expanded (per comments above) regional scale.

- **Insufficient decommissioning and associated effects ignored**

Decommissioning dams and generating facilities requires extensive planning and can have significant environmental effects. For example, sediment that has accumulated behind dams can degrade water quality when released, adversely affecting fish and fish habitat. Changing water levels can affect sensitive species. These impacts should be considered in the EIS.

Thank you for considering these comments.

Sincerely,

ALBERTA WILDERNESS ASSOCIATION

A handwritten signature in black ink that reads "Carolyn Campbell". The signature is written in a cursive style and is underlined with a single horizontal line.

Carolyn Campbell, Conservation Specialist