

## 8.0 CONCLUSIONS

This report has focused on the potential environmental impacts and socio-economic benefits that could result from the exploration and development of oil and gas reservoirs in the offshore and near onshore areas of British Columbia. The evidence, from a relatively extensive review of conditions off British Columbia in comparison with other oil and gas areas worldwide and the latest engineering technology that applies to development, indicates that there are no unique fatal flaw issues that would rule out exploration and development activities.

While earthquake risks are higher than in most, but not all, oil and gas areas, technology exists to minimize the risks in accordance with generally accepted principals of societal risk factors. More extensive investigations would be required than in many locations to identify hazard areas. Design technologies are available to provide security to facilities during major earthquake and storm events. The cost of facilities required to protect the environment may make the economic justification of exploration and development questionable, depending on the reserves available at a given location. Regardless, state-of-the-art designs can be implemented to ensure satisfactory risk factors related to potential environmental damage and human safety.

Environmental Impact Assessments conducted for offshore oil and gas operations in Atlantic Canada and other jurisdictions have identified a number of potential environmental effects of offshore oil and gas development and operations on the biological environment. Where effects were identified, strategies for mitigating these effects, such as implementation of Environmental Management Systems or modification of engineering technologies used to undertake specific activities, have been able to reduce the potential environmental effects to levels considered by regulatory agencies as not significant. In



addition, cumulative effects assessments have concluded that the effects resulting from routine operations, when managed in accordance with regulations and best management practices, would be neither additive nor cumulative.

One of the important issues to be addressed by Government in the regulation of oil and gas developments offshore will be the degree to which regulations are prescriptive. The eastern Canadian offshore regulations are heavily prescriptive which can place a significant cost burden on potential offshore activities. With the advances in the technology of offshore investigations, drilling and production, there is significant opportunity to use a results oriented, review and approval process to ensure the highest economic benefit while ensuring that the potential for environmental and safety risks are adequately controlled.

In conclusion, the study has found that there are no specific design, geohazard or environmental issues that would preclude the development of the offshore oil and gas reservoirs of British Columbia. However, the economic viability of a specific reservoir may be adversely impacted by the costs associated with mitigating the geohazard and environmental risks.

