
**BRITISH COLUMBIA
OFFSHORE OIL AND GAS
TECHNOLOGY UPDATE**

October 19, 2001



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PREFACE

In 1998, the British Columbia Information, Science and Technology Agency, on behalf of the Premier's Advisory Council on Science and Technology, tendered and issued a contract to AGRA Earth and Environmental Limited (AGRA) (St. John's, Newfoundland office) to review and report on offshore development technologies. The AGRA study examined the status of the offshore exploration industry in both Canada and elsewhere, particularly as it related to the issues identified in the Environmental Assessment Panel Report on offshore oil and gas issues dated 1986. The 1998 report was not released by the Province. Specific objectives of the 1998 report were to provide the Premier's Advisory Council on Science and Technology with:

- the status of the offshore exploration industry in Canada and elsewhere;
- information regarding the status of offshore issues as they relate to issues identified in the 1986 Panel Report; and
- a review of advancements in the field and experience in other jurisdictions which would be applicable to British Columbia and a summary of information gaps that might prevent a full assessment of oil and gas exploration and development risks and impacts.

The Province of British Columbia has recently committed to review the existing moratorium on offshore oil and gas development. As the lead coordinating agency for oil and gas resources off the coast of British Columbia, the Ministry of Energy and Mines issued a Request for Proposals on August 20, 2001 to prepare an update of the 1998 AGRA report using existing information and literature. The intent of this update report is to document background information for use by the government in reviewing the moratorium. The scope of work for this contract was specifically to:

- review the 1986 panel report (Offshore Hydrocarbon Exploration, a Report and Recommendations of the West Coast Offshore Exploration Environmental Assessment Panel) and the 1998 AGRA report (Review of Offshore Development Technologies); and
- update the 1998 review to consider additional scientific and technological advancements, changes in regional economics and developments in other jurisdictions.

The focus of this update was on offshore oil and gas engineering, environment and socio-economic factors, and state-of-the-art technologies. As this is an update of the 1998 AGRA report and not a new study, the project team used portions of the previous text. Those segments of the 1998 report that are incorporated verbatim, or with minor edits, have been italicized for clear identification. Rather than address specific changes that have occurred between 1986 and 2001 or between 1998 and 2001, this update has focussed on updating the information in the AGRA report and addressing data and information gaps with an emphasis on current issues and future trends in the offshore industry in Canada and around the world. This report is not intended to be a comprehensive assessment of all available engineering technologies and approaches to the design of offshore structures or an environmental impact assessment of offshore oil and gas activities. Rather, it is intended to be a background report summarizing the latest technologies, their application to the safety of offshore oil and gas operations and potential environmental effects of offshore oil and gas activities. This report is intended to be a "stand alone" document and the reader should not have to refer to the previous reports to understand the issues.



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