Characterizing Tight Gas Resources in Western Canada

David W. Flint*
Forward Energy Group Inc., Calgary, AB, Canada dave.flint@forwardenergy.ca

and

Robert K. Dixon
Forward Energy Group Inc., Calgary, AB, Canada

The largest source of unconventional gas production in the United States in 2004 was "tight sands". This source accounted for 27% of the total production and 67% of the unconventional production. The EIA forecasts that US tight gas production will total 137 Tcf between 2003 and 2030. Tight gas resources in the United States have been the focus of significant tax incentives for development, regulatory definition and sustained government-funded research programs since 1977.

The term "tight gas" is used frequently in Canada: by public companies to describe their current producing properties and investment strategies, by some government agencies to describe a resource type, by technical professionals in presentations and papers and by journalists in popular articles and in trade publications. According to these sources, tight gas resources are being developed and produced in Western Canada, the undeveloped resource base is believed to be very large and tight gas is expected be an increasingly important source of supply from Western Canada with improving price and technology.

However, Canadian federal and provincial agencies and researchers have neither adopted nor consistently applied the term "tight gas" to Canadian gas resources. The historical and current production from tight gas resources is not tracked or reported by public agencies in Canada. Appropriate and current estimates of the ultimate resource potential and future supply from tight gas resources for Western Canada have not been published by credible and independent sources.

The Western Canada Tight Gas Resource Characterization project was initiated to address the following objectives:

- 1. Communicate the tight gas resource opportunity by establishing a workable definition for tight gas accepted by stakeholders in Western Canada
- 2. Characterize the tight gas opportunities into play types and analyze their supply trends
- 3. Estimate remaining tight gas resource potential and model its future conversion into supply
- 4. Summarize resource and supply potential and identify technology and opportunities to maximize development of tight gas in Western Canada

This presentation will provide an overview of the project findings.