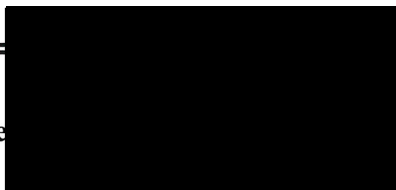


Committee on Energy and Commerce
U.S. House of Representatives
 Witness Disclosure Requirement - "Truth in Testimony"
 Required by House Rule XI, Clause 2(g)

1. Your Name: HAROLD PETER HOWARD		
2. Are you testifying on behalf of the Federal, or a State or local government entity?	Yes	No X
3. Are you testifying on behalf of an entity that is not a government entity?	Yes	No X
4. Other than yourself, please list which entity or entities you are representing:		
5. Please list any Federal grants or contracts (including subgrants or subcontracts) that you or the entity you represent have received on or after October 1, 2009:		
6. If your answer to the question in item 3 in this form is "yes," please describe your position or representational capacity with the entity or entities you are representing:		
7. If your answer to the question in item 3 is "yes," do any of the entities disclosed in item 4 have parent organizations, subsidiaries, or partnerships that you are not representing in your testimony?	Yes	No
8. If the answer to the question in item 3 is "yes," please list any Federal grants or contracts (including subgrants or subcontracts) that were received by the entities listed under the question in item 4 on or after October 1, 2009, that exceed 10 percent of the revenue of the entities in the year received, including the source and amount of each grant or contract to be listed:		
9. Please attach your curriculum vitae to your completed disclosure form.		

Signature



Date: September 10/12

Harold Peter Howard

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OBJECTIVE

To work in an environment that would benefit from my leadership, teamwork, communication skills, computer skills, and my attitude towards innovation, initiative and problem solving backed by strong technical skills and oil and gas industry experience.

QUALIFICATIONS

Over 40 years of consulting experience in the oil and gas industry with a focus on providing service to clients in the areas of hydraulic simulations, computer modelling, data retrieval, manipulation, database development, international projects, gas supply and demand and desktop software development.

WORK EXPERIENCE

Dates	Employer	Position
Apr 2010 to present	Canadian Energy Research Institute	President and CEO
Nov 2004 to Apr 2010	Canadian Energy Research Institute	Vice President
Jun 1993 to Nov 2004	Arundel Information Systems Ltd	President
Jan 1990 to Nov 2004	J.R. Lacey International	Associate
May 1991 to Sept 1995	CadwestLogis Information Systems Ltd	Vice-President
May 1985 to May 1991	Logis Data Systems Ltd	President
Aug 1975 to May 1985	Computer Research Associates Ltd.	Senior Engineer
Feb 1971 to Aug 1975	Alberta Gas Trunk Line Company Ltd.	Junior Engineer

EDUCATION

B.SC Mechanical Engineering,
University of Alberta, Edmonton (1970)

PROFESSIONAL DESIGNATION

Association of Professional Engineers, Geologists and
Geophysicists of Alberta (APEGGA)

DETAILED WORK EXPERIENCE

Canadian Energy Research Institute

November 2004 – Present. Currently holds the position of President of the Institute. In addition to my duties of overseeing the research work at CERI I also co-authored several studies including an examination of the economic impacts of the Oil and Gas industry in Canada, the changing natural gas supply/demand relationship for Ontario and the supply costs for conventional and unconventional

resources in Canada. In addition I also directed a research project to determine the economic impact of LNG imports into Atlantic Canada and the potential impact on the North American gas supply. As well as, research project to determine the capacity of the export pipelines from the Western Canada Sedimentary Basin and the impacts of Alaskan gas and Mackenzie Valley gas on the pipeline infrastructure. He also participated in a study of the supply costs of producing natural gas from coal seams in the plains region of Alberta.

Arundel Information Systems Ltd

Dec 2003 – Nov 2004: Development of a computer model to forecast the short- to medium-term recovery of liquids accounting for the pressure losses in the well bore and gathering system, well productive capacities, established reserve estimates and plant operation factors.

Sept 2001 – Dec 2003: client J.R. Lacey International. Worked as an independent team member with responsibilities for the converting, linking and testing of an existing gas flow hydraulic simulator, written in the Basic language, and a gas flow closed loop simulator, written in the FORTRAN language, to the common object basis using the Borland Delphi tool.

July 2000 – Sep 2001: client IHS Energy Group (now IHS Accumap Ltd). Worked on 12 assignments that involved communicating with existing corporate clients to develop processes for custom retrieval systems, manipulation of data, mathematical calculations and report generation. Each process involved determining the specific information required by the client, the type of report medium, estimating the time and resources involved, programming the retrieval requirements and presentation of results.

Sept 1998 - July 2000: client IHS Energy Group. Contracted to program, test and install 3 programs that were required to import provincial government reserves data, flow potential data and gas contracted lands data into the corporate PPDM database. Each of these programs involved receiving data for one or more Canadian provincial regulatory agencies in different formats and transposing the information into a consistent database representation.

Sept 1996 – Sept 1998: client IHS Energy Group. Contracted to work as a member of an internal company team whose tasks were to transpose data contained in an existing IBM model 204 Oracle database to a Sun server Oracle 8.0 database using an industry standard PPDM data model. The project also required a new innovative process to incorporate new public sources of information into the model. Responsibility included designing, testing and implementing in excess of 15 data loading programs then were needed to move information in a flat file format to the PPDM Oracle database. These programs were to be designed to run automatically on a daily, weekly or monthly basis or to be initiated at random points in time. Performed the necessary documentation of the loading process and cross-referenced each of the source data elements to guarantee that database was properly representing the data and did not conflict with other sources of data.

Mar 1996 – Oct 1997: client J.R. Lacey International. Participated as a member of an international study team determining the reliability of the Russian Gas Pipeline System. The study objectives were to assess the integrity of the pipeline system, identify risks to the reliability of supply, and to propose mitigating programs to minimize risk. The team was made up of 6 Canadians, 3 Russians and 10 Europeans. The study identified 56 locations where significant risk was present and could contribute to the interruption in gas flow to Europe. Each of these locations were examined and ranked based on the potential interruption of gas flow to Europe. A mitigating project was detailed and a cost applied and tested against the entire system to come up with a total capital cost exposure. Responsibilities included the identification of situations where mechanical failures in the system could lead to interruption in flow and the possible extent of the interruption. Analysis of equipment failures and leakages were detailed and evaluated as possible mitigation projects. Proposed 10 of the locations that included places where pipelines crossed over other pipelines, river crossings that did not have redundant lines, compression

facilities that did not have standby potential and recommended interconnects that could reroute gas in the event of a major outage.

Nov 1995 – July 1996: client IHS Energy Group. Developed a new desktop computer system to query, retrieve, analyze and display core data in text grid form and graphical chart form. Designed the analytical system for applying sensitivity analysis to the raw data to permit user interaction with the original data. Determined through industry investigation the current systems and procedures utilized for displaying and manipulating core information. Database designed to minimize the access time for retrieving data from the corporate server database.

June 1990 – Sept 1993: client J.R. Lacey International. Contracted as a member of an international study team to create a composite report, entitled "The Pan-European Gas Transmission System". This report was a current look at the European gas transmission industry with analysis that stretched from the Iberian Peninsula in the south, to the North Sea in the north and eastward to the massive gas reserves of Western Siberia. The team was made up of 4 Canadians, 4 Russians, and 14 Europeans. The goals of the study were to give the European gas companies a look at the complexities of the Russian gas transmission system complete with its ability to supply gas in the future, and give the Russians a look at the demand potential in Western Europe including the United Kingdom. My responsibilities were to gather information from a variety of sources, both European and Russian, and assemble it into databases that would be used to study and analyze the supply, transmission and demand for natural gas both from an historic and a future potential basis. A subtask of the project was to verify the accuracy of the information by using computer simulations to compare against theoretical results.

CadwestLogis Data Systems Ltd

May 1991 – Sept 1995: Responsibilities as Vice-President and Senior Partner included the coordination for merging two companies with complementing expertise into a single corporate entity. Facilitated the creation of the first seamless integration of oil and gas online databases and map generation. Supervised the development of 6 custom projects for clients that required the extraction, manipulation and inclusion of proprietary calculations, coupled with map presentations incorporating color as a discriminating element. Introduced the concept of generating activity maps that dealt with current events of land sales, well activity and sour gas locations as a marketing tool for the company. Investigated the concept of doing a pre analysis, retrieval and manipulation of information related to crown land sales and developing a consistent set of reports and maps that would be selected individually, by area or by a set of client parameters.

Logis Data Systems Ltd

May 1985 – May 1991: As a Partner and President I directed the development of a large mainframe database that dealt with the Canadian oil and gas industry public data coupled with one of the first dial-up data access and retrieval systems. Coordinated the design and development of a database structure that permitted information from the 3 western provincial regulatory agencies to be accessible by a common set of programs. Consulted to 50 separate clients whose special projects involved designing custom data retrievals, and specialized data analyses systems.

Computer Research Associates Ltd

Aug 1975 – May 1985: Computer Research Associates was a service company that developed specialized software in the areas of oil and gas accounting, oil and gas field flow modeling and gas field supply and demand modeling. Co-designed and co-programmed The Gas Energy Management Model which was a mainframe computer simulator that analyzed the current and future relationship (up to 25 years into the future) of gas supply and demand for an entire country. Worked as a team member in gathering information from various public sources to develop a database based on Canadian gas reserves that was required to supply the basic information for calculating a deliverability profile for each gas pool. The database represented historic production, reserves, productive capability, hydrocarbon components, contract obligations and transmission system capacities. Assisted in the marketing of the program that

resulted in sales to the Alberta Energy and Utilities Board, Dome Petroleum, Imperial Oil Ltd. and Nova Corporation.

Alberta Gas Trunk Line Company Ltd (became Nova Corporation, now TransCanada Pipelines Ltd)

Feb 1971 – Aug 1975: Employed as a member of a system planning team that was responsible for designing pipe and compression additions to the company existing gas transmission system in order to meet requests for increased flow deliveries of Alberta gas to the provincial borders. Worked with other company departments to investigate, design, calculate facility requirements, cost estimate and prepare regulatory documents to construct a northern pipeline. This pipeline was required to transport Mackenzie Delta gas south to Alberta for connection with the existing system and moving the gas on to Eastern Canada and the United States.