IN THE ARBITRATION
UNDER CHAPTER ELEVEN OF THE NAFTA
AND THE ICSID ARBITRATION (ADDITIONAL FACILITY) RULES

BETWEEN:

MOBIL INVESTMENTS CANADA INC. &
MURPHY OIL CORPORATION

Claimants

AND

GOVERNMENT OF CANADA

Respondent

ICSID Case No. ARB(AF)/07/4

CLAIMANTS' MEMORIAL

ARBITRAL TRIBUNAL:

Professor Hans van Houtte, President
Professor Merit Janow
Professor Philippe Sands

August 3, 2009

PUBLIC VERSION

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TABLE OF ABBREVIATIONS

CAPP	Canadian Association of Petroleum Producers
C-CORE	Center for Cold Ocean Research
CNLOPB	Canada-Newfoundland and Labrador Offshore Petroleum Board
CRA	Canada Revenue Agency
E&T	Education and Training
HMDC	Hibernia Management and Development Company Ltd.
NAFTA	North American Free Trade Agreement
POA	Production Operations Authorization
PRAC	Petroleum Research Atlantic Canada
SR&ED	Scientific Research and Experimental Development
R&D	Research and Development

I.

INTRODUCTION

1. When Canada entered into the NAFTA in 1994, it undertook a specific obligation with respect to petroleum development projects off the coasts of Newfoundland and Labrador, such as the Hibernia and Terra Nova projects. At that time, Canada had enacted the Accord Acts, which included a local content requirement applicable to such projects that was contrary to the NAFTA's prohibition on performance requirements. Canada's treaty partners allowed it to retain the measure, but they did so based on Canada's explicit undertaking and obligation not to put into place any new local content requirement or to make the Accord Act restrictions any less conforming with its treaty obligations.

2. Ten years later, Canada breached that obligation. In November 2004, the Canada-Newfoundland Offshore Petroleum Board adopted Guidelines for Research and Development Expenditures (the "Guidelines" or the "R&D Expenditure Guidelines"). The Guidelines require Claimants and other investors in offshore petroleum projects to pay millions of dollars per year for unnecessary research and development ("R&D") in the Province of Newfoundland and Labrador. The Guidelines further require investors to pay into a Board-managed fund any moneys assessed that could not be spent on R&D. The new Guidelines thus assure that, regardless of whether there is any commercial need for the requisite level of R&D expenditures or whether there is sufficient capacity in the Province to absorb them, investors will have to pay out millions of dollars every year.

3. The Guidelines are far more restrictive than the local content provisions of the Accord Acts and also the R&D provisions in the Benefit Plans and the Framework Agreement that had been specifically agreed by Claimants and other project proponents with the Canadian and provincial governments. Those measures required the project proponents to make provisions for R&D expenditures in the Province and to outline their plans in that regard, but they did not specify any fixed amount of spending, either in total amounts or as a percentage of revenues. They therefore left it to the investor to decide how much to spend based on commercial need and resources available in the Province. In practice, during the

development and construction of the Hibernia and Terra Nova project facilities, there was a substantial need for R&D to address design and engineering challenges unique to the Newfoundland offshore environment. As a result, prior to the enactment of the Guidelines in 2004, the owners of the Hibernia and Terra Nova projects collectively spent approximately $163.7 million on R&D in the Province. The anticipated need for R&D in the future is, however, nominal, because both projects are now at mature stages in their production cycles and thus have little need for ongoing technological innovation to support project operations.

4. The new Guidelines require R&D expenditures several times greater than what the Claimants otherwise would spend in connection with their investments in the Province. The Guidelines also require pre-approval by the Board of individual R&D expenditures, while previously the project operators simply had to report their R&D spending on an annual basis after the fact. The text of the Guidelines themselves and the Board's actions to enforce them demonstrate that compliance is mandatory.

5. The promulgation and enforcement of the Guidelines therefore violate the NAFTA's Article 1106(1) prohibition on performance requirements and breach Canada's specific undertaking with respect to petroleum projects off the coasts of Newfoundland and Labrador. Because the Guidelines frustrate the Claimants' legitimate expectations with regard to the regulatory framework governing their investments in the territory, based among other things on the explicit agreements with the Board and with the federal and provincial governments that did not require any R&D other than what project needs required, their imposition also amounts to a breach of the minimum standard of treatment guaranteed by Article 1105 of the treaty. Compliance with the Guidelines over the remaining lifetime of their investments in the Hibernia and Terra Nova projects is expected to cause Claimants to suffer damages in excess of CDN $65 million on a present value basis.

II.

FACTUAL CONTEXT

A. The Parties

1. The Claimants and Their Enterprises

6. Claimants Mobil Investments Canada Inc. and Murphy Oil Corporation are corporations organized under the laws of the State of Delaware, United States of America.[1] They indirectly control the interests in the oil extraction projects that are at issue in this case.

(a) Mobil Investments Canada Inc.

7. Claimant Mobil Investments Canada Inc. is an indirect subsidiary of Exxon Mobil Corporation, a corporation organized under the laws of New Jersey, United States of America. Exxon Mobil Corporation is an energy company, the common shares of which are publicly traded on the New York Stock Exchange and other stock exchanges within and outside the United States.

8. Claimant Mobil Investments Canada Inc. indirectly controls a 33.125% share in the Hibernia oil extraction project through its ownership and control of companies organized under Canadian law. It similarly controls a 22% share in the Terra Nova oil extraction project.

9. Claimant Mobil Investments Canada Inc. owns and controls all of the outstanding shares of ExxonMobil Canada Investments Company, a company organized under the laws of the Province of Nova Scotia, Canada.[2] ExxonMobil Canada Investments Company in turn owns and controls all of the outstanding shares of ExxonMobil Canada Finance Company,

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[1] *See* Certificates of Incorporation attached as Exhibit C to the Request for Arbitration.

[2] *See* **CE-16**, Share Certificate and Accompanying Secretary's Certification, Certificate of Incorporation, and Certificate of Registration of ExxonMobil Canada Investments Company.

also organized under the laws of the Province of Nova Scotia.[3] ExxonMobil Canada Finance Company in turn owns all of the outstanding shares of ExxonMobil Canada Ltd., a corporation organized under the federal law of Canada (the Canada Business Corporations Act).[4] ExxonMobil Canada Ltd. directly owns a 28.125% share in the production license for the Hibernia oil field and associated rights and interests and a 22% share in the production license for the Terra Nova oil field and associated rights and interests.[5]

10. ExxonMobil Canada Ltd. also is the sole shareholder in ExxonMobil Canada Resources Company, a company organized under the laws of the Province of Nova Scotia.[6] As successor to ExxonMobil Resources Ltd., ExxonMobil Canada Resources Company is the owner of all of the outstanding shares of ExxonMobil Canada Hibernia Company Ltd., a company organized under the federal laws of Canada.[7]

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[3] *See* **CE-17**, Share Certificates and Accompanying Secretary's Certification, Certificate of Incorporation, and Certificate of Registration of ExxonMobil Canada Finance Company.

[4] *See* **CE-18**, Share Certificate and Accompanying Secretary's Certification of ExxonMobil Canada Ltd., Articles of Amendment of Mobil Oil Canada Ltd., and Certificate of Amendment of ExxonMobil Canada Ltd. ExxonMobil Canada Ltd. was formerly known as Mobil Oil Canada Ltd. *Id.*

[5] *See* **CE-26**, CNLOPB Registry Entry 93003, Transfer of an Undivided Share in a Production License (Hibernia) (Mar. 25, 1993) (hereinafter "CNLOPB Registry Entry 93003") (following transfer, Mobil Oil Canada Ltd. held a 28.125% share in production license for Hibernia); **CE-27**, CNLOPB Registry Entry 01026, Production License No. 1002 (Terra Nova) (Aug. 21, 2001) (hereinafter "CNLOPB Production License No. 1002 (Terra Nova)"); *see also* **CE-28**, CNLOPB Registry Docket for Production License 1001 (Hibernia) (May 22, 2001) (acknowledging change in name of Mobil Oil Canada Ltd. to ExxonMobil Canada Ltd.).

[6] **CE-19**, Share Certificate and Accompanying Secretary's Certification of ExxonMobil Canada Resources Company.

[7] *See* **CE-20**, Certificate of Amalgamation of ExxonMobil Canada Resources Company and Accompanying Certificate of Continuance (hereinafter "Amalgamation Certificate") (showing that ExxonMobil Resources Ltd. was amalgamated into ExxonMobil Canada Resources Company); **CE-21**, Share Certificate and Accompanying Secretary's Certification of Mobil Canada Hibernia

ExxonMobil Canada Hibernia Company Ltd. directly owns a 5% participation interest in the Hibernia project, an unincorporated joint venture with other energy companies with the purpose of exploring for, producing, transporting and selling hydrocarbons from the Hibernia field.[8] It also owns a 5% share in the production license for the Hibernia oil field and associated rights and interests.[9]

11. In addition, ExxonMobil Canada Ltd. and ExxonMobil Canada Resources Company are the only partners in ExxonMobil Canada Properties, a partnership organized under the laws of the Province of Alberta, Canada.[10] ExxonMobil Canada Properties directly owns a 28.125% participation interest in the Hibernia project and a 22% participation interest in the Terra Nova project, an unincorporated joint venture with other energy companies with the purpose of exploring for, producing, transporting and selling hydrocarbons from the Terra Nova oil field.[11]

12. ExxonMobil Canada Hibernia Company Ltd. and ExxonMobil Canada Properties are enterprises owned or

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Company Ltd., Articles of Amendment of Mobil Canada Hibernia Company Ltd., and Certificate of Amendment of ExxonMobil Canada Hibernia Company Ltd. (showing change in name of Mobil Canada Hibernia Company Ltd. to ExxonMobil Canada Hibernia Company Ltd.).

[8] **CE-10**, Hibernia Field Operating Agreement, Amending Agreement (March 24, 1993).

[9] *See* **CE-26**, CNLOPB Registry Entry 93003 (following transfer, Mobil Canada Hibernia Company Ltd. held a 5% share in production license for Hibernia); *see also* **CE-28**, CNLOPB Registry Docket for Hibernia (May 22, 2001) (acknowledging change in name of Mobil Canada Hibernia Company Ltd. to ExxonMobil Canada Hibernia Company Ltd.).

[10] *See* **CE-22**, Proof of Filing of Amended Partnership (ExxonMobil Canada Properties); **CE-20**, Amalgamation Certificate (showing that ExxonMobil Resources Ltd. was amalgamated into ExxonMobil Canada Resources Company).

[11] *See* **CE-9**, Hibernia Field Operating Agreement; **CE-14**, Amended and Restated Terra Nova Development and Operating Agreement (July 18, 2003) (hereinafter "Terra Nova Development and Operating Agreement").

controlled by Claimant Mobil Investments Canada Inc. within the meaning of Article 1117 of the NAFTA.

13. The operator of the Hibernia project is the Hibernia Management and Development Company Ltd. ("HMDC"), a company organized under the federal laws of Canada. [12] ExxonMobil Canada Ltd. and ExxonMobil Canada Hibernia Company Ltd. respectively own 28.125% and 5% of its outstanding shares.[13]

(b) Murphy Oil Corporation

14. Claimant Murphy Oil Corporation is an energy company, the common shares of which are publicly traded on the New York Stock Exchange and other stock exchanges within and without the United States.

15. Claimant Murphy Oil Corporation is the sole shareholder of Murphy Oil Company Ltd., a company organized under the federal laws of Canada.[14] Murphy Oil Company Ltd. is an enterprise owned or controlled by Claimant Murphy Oil Corporation, within the meaning of NAFTA Article 1117(1).

16. Murphy Oil Company Ltd. directly owns a 12% share in the production license for the Terra Nova oil field and associated rights and interests. [15] It also owns a 12% participation interest in the Terra Nova project.[16]

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[12] **CE-25**, Certificate and Articles of Incorporation of Hibernia Management and Development Company Ltd. (Dec. 21, 1988) (hereinafter "HMDC Certificate and Articles of Incorporation").

[13] *See* **CE-23**, Share Certificates and Accompanying Secretary's Certification of Hibernia Management and Development Company Ltd. For a description of HMDC's role, see *infra* ¶ 29.

[14] *See* **CE-24**, Resolutions of the Sole Shareholder of Murphy Oil Company Ltd. and Murphy Atlantic Offshore Oil Company Ltd. (June 1, 2009).

[15] *See* **CE-27**, CNLOPB Production License No. 1002 (Terra Nova).

[16] *See* **CE-14**, Terra Nova Development and Operating Agreement.

17. Murphy Oil Company Ltd. is also the sole shareholder of Murphy Atlantic Offshore Oil Company Ltd., a company organized under the federal laws of Canada.[17] Murphy Atlantic Offshore Oil Company Ltd. is an enterprise owned or controlled by Claimant Murphy Oil Corporation, within the meaning of NAFTA Article 1117(1).

18. Murphy Atlantic Offshore Oil Company Ltd. directly owns a 6.5% share in the production license for the Hibernia oil field and associated rights and interests, and in the Hibernia project.[18]

2. The Respondent

19. Respondent Canada is a State and a Party to the NAFTA. It is a constitutional monarchy with a parliamentary government and a federal system. Its ten provinces have autonomy in a number of respects from the Canadian federal government. One of its provinces is the Province of Newfoundland and Labrador.

20. By Article 105 of the NAFTA, Canada undertook to "ensure that all necessary measures are taken in order to give effect to the provisions of this Agreement, including their observance, except as otherwise provided in this Agreement, by state and provincial governments."

B. The Oil Fields

21. The Hibernia and Terra Nova fields are currently the two largest oil fields off Canada's Atlantic coast. They are in one of the most technically challenging locations in the world. Rough seas, a seasonal threat of sea ice and icebergs, and persistently wet weather conditions complicate operations. To

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17 *See* **CE-24**, Resolutions of the Sole Shareholder of Murphy Oil Company Ltd. and Murphy Atlantic Offshore Oil Company Ltd. (June 1, 2009).

18 *See* **CE-26**, CNLOPB Registry Entry 93003 (following transfer, Murphy Atlantic Offshore Oil Company Ltd. held a 6.5% share in production license for Hibernia); First Witness Statement of Cal Buchanan (hereinafter "Buchanan Statement I"), ¶ 7; *see also* **CE-10**, Hibernia Field Operating Agreement, Amending Agreement (Mar. 24, 1993).

reach the productive hydrocarbon reserves deep underneath the seabed, advanced directional drilling technology was required.

1. Hibernia

22. The Hibernia field was discovered in 1979. It is the larger of the two fields and the fifth largest ever identified in Canada. It was the first offshore oil project in the Province of Newfoundland and Labrador and remains the largest petroleum development project there to date.[19] It is located in the North Atlantic Ocean, 315 kilometers east-southeast of St. John's, Newfoundland.[20]

23. The drilling and production platform, which stands 224 meters high, has storage capacity for 1.3 million barrels of crude oil and can accommodate production of approximately 230,000 barrels per day. It was constructed from 1990 to 1997.[21] The gross capital investment in the construction of the facility was approximately $5.8 billion.[22]

24. Oil production at the facility began in November 1997.[23] As of June 30, 2009, approximately 642 million barrels had been produced. At peak production, approximately four years ago, about 200,000 barrels were produced per day. Production is now in decline and averages about 140,000

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[19] Portions of the field known as the AA Block and the Hibernia Southern Extension, which have yet to be developed, are not a subject of this arbitration.

[20] *See* **CE-2**, Hibernia, *About Hibernia*, http://www.hibernia.ca/html/about_hibernia/index.html, at EMM0000008 (last visited July 28, 2009) (hereinafter "Hibernia Website").

[21] *See id.* at EMM0000010-11.

[22] *See* **CE-70**, Hibernia, 1998 Canada/Newfoundland Benefits Update, § 1.0 (undated) (hereinafter "Hibernia 1998 Benefits Report"). All references to dollars in this submission are in Canadian currency. Except as indicated in the discussion of damages, amounts have not been adjusted to reflect the time value of money.

[23] *See* **CE-2**, Hibernia Website, at EMM0000010 ("The completed platform was towed to the Hibernia oil field and positioned on the ocean floor in June of 1997 and began producing oil on November 17, 1997.").

barrels per day. Production is expected to continue through 2036.[24]

25. R&D expenditures on the project have been substantial, due in large part to the extreme environmental conditions in the area and the distance apart and depth of the well-drilling locations.[25] To date, the Hibernia interest owners have spent more than $226 million on R&D for this project.[26]

26. The platform includes a gravity base structure ("GBS") — the first of its kind in the Arctic environment --- specially designed to withstand the impact of sea ice and icebergs and to allow for year-round production. Violent winter storms with heavy snowfalls and wave heights exceeding 20 meters, overwhelmingly wet weather conditions, and fog have posed other environmental challenges requiring technological innovation.[27]

27. With petroleum reservoirs located as deep as 3700 meters beneath the seabed, and well locations as far as 8.5 kilometers from the platform, the project also required cutting-edge drilling technology to reach available reserves.[28]

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[24] **CE-11**, Hibernia Production Profile (2009).

[25] First Witness Statement of Edward Graham, ¶¶ 11-13 (hereinafter "Graham Statement I").

[26] *See infra* ¶ 92; **CE-143**, Hibernia SR&ED Profile; **CE-144**, Hibernia SR&ED Acceptance Chart.

[27] **CE-3**, HMDC, The Hibernia Development Project: An Evaluation of Canada-Newfoundland Benefits Achievements as of June 30, 1995, at 26; Graham Statement I, ¶ 12.

[28] *See, e.g.*, **CE-2**, Hibernia Website, at EMM0000012 ("If the production platform (labeled GBS) were placed at the head of St. John's Harbour, the bottom of the longest well drilled by 1999 would reach to near the airport, about 8 and a half kilometers away."); **CE-4**, Hibernia Project Overview Slide (undated); **CE-5**, Worldwide Horizontal Displacement and Extended-Reach Drilling Charts (undated); Graham Statement I, ¶ 13. [redacted]. Graham Statement I, ¶ 13.

28. The Hibernia project is owned by a consortium of working interest holders, among which Mobil Investments Canada Inc. indirectly controls the largest interest at 33.125%. Murphy Oil Corporation indirectly controls a 6.5% interest.[29] At the outset of the project, Mobil Oil Canada, Ltd., a predecessor in interest to ExxonMobil Canada, was the lead proponent and acted on behalf of the consortium in seeking regulatory approvals.[30]

29. In 1988, HMDC was established to manage and operate the project on behalf of the interest owners.[31] As agent for the consortium, HMDC itself does not realize any revenues. The owners contribute to a joint account in proportion to their respective ownership interests and claim their share of the oil produced directly at the wellhead.[32] Since 2002, ExxonMobil Canada Ltd. and Exxon Mobil Canada Properties have provided substantial management support to the project, including by seconding personnel to HMDC.[33]

2. Terra Nova

30. The Terra Nova field was discovered in 1984. It is located in the North Atlantic Ocean, 350 kilometers east-

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29 The remaining interest owners and their respective shares are: Chevron Canada Resources (26.875%), Petro-Canada (20%), Canada Hibernia Holding Corporation (8.5%), and StatoilHydro Canada Ltd (5%). **CE-2**, Hibernia Website, at EMM0000010.

30 *See, e.g.*, **CE-45**, Mobil Oil Canada, Hibernia Canada/Newfoundland Benefits Plan (Sept. 15, 1985) (hereinafter "Hibernia Benefits Plan").

31 First Witness Statement of Paul Phelan, ¶ 6 (hereinafter "Phelan Statement I"); **CE-25**, HMDC Certificate and Articles of Incorporation.

32 Phelan Statement I, ¶ 6; **CE-9**, Hibernia Field Operating Agreement, arts. 3, 7.

33 Phelan Statement I, ¶ 8.

southeast of St. John's, Newfoundland, and 33 kilometers from Hibernia.[34]

31. The floating production, storage and offloading system ("FPSO") used in this location is one of the largest ever built. It measures 292.2 meters long and 45.5 meters wide with a storage capacity of 960,000 barrels of oil. It was constructed from 1999 until 2001.[35] The gross capital investment in the construction of the facility was approximately $2.985 billion.[36]

32. Production from the field began in January 2002. As of June 30, 2009, approximately 275 million barrels of oil had been produced. Peak production occurred in 2007, when the facility produced approximately 100,000 barrels per day.[37] Production is now in decline and averages about 100,000 barrels per day. Production is expected to continue through 2018.[38]

33. Although the need for R&D was not as extensive at Terra Nova as it was at Hibernia, the project owners made substantial investments in technology designed to protect the FPSO from environmental hazards. In particular, the mechanism through which the facility connects to subsea flowlines was designed to include a quick-disconnect feature, allowing the FPSO to unmoor and evacuate the area in an emergency situation such as the accumulation of pack ice or

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[34] *See* **CE-13,** Petro-Canada, *Terra Nova*, www.petro-canada.ca/en/about/721.aspx, at EMM0000233 (last visited July 28, 2009) (hereinafter "Terra Nova Website").

[35] *See id.* at EMM0000234-35; **CE-12**, Terra Nova Facilities Overview Presentation, at EMM0000227 (Jan. 21, 2009).

[36] **CE-122**, Letter from G. Vokey, Petro-Canada, to F. Smyth, CNLOPB (May 7, 2009). The Board reports the Terra Nova development cost slightly lower, at $2.8 billion. Because the Board uses the $2.8 billion figure to calculate the Terra Nova development phase credit, Claimants' valuation expert has adopted the Board's number for purposes of the damages model. *See* Expert Report of Howard N. Rosen, Exhibit 5 (July 30, 2009) (hereinafter "Rosen Report").

[37] **CE-15**, Terra Nova Production Profile.

[38] *Id.*

the approach of an iceberg.[39] To date, the Terra Nova interest owners have spent over $24 million on R&D for the project.[40]

34. The Terra Nova project is organized as an unincorporated joint venture. It is managed and operated for a consortium of working interest owners by the largest shareholder, Petro-Canada, which owns a 33.99% interest.[41] Mobil Investments Canada Inc. indirectly controls a 22% interest. Murphy Oil Corporation indirectly controls a 12% interest.[42] As HMDC does for Hibernia, Petro-Canada invoices the Terra Nova interest owners for their share of operating costs, and the owners have a right to claim their *pro rata* share of crude produced at the wellhead.[43]

C. R&D in the Upstream Petroleum Industry

35. An upstream petroleum project consists of three phases: exploration, development and production. During the exploration phase, companies seek to determine whether hydrocarbons exist in a given area. If hydrocarbons are discovered in what is believed to be commercial quantities, then the project moves into the development phase, where design, engineering and construction occurs. The production phase begins with the first production of hydrocarbons after the completion of the project infrastructure. Refining and distribution of the extracted oil constitutes the downstream end of the cycle.

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39 *See* **CE-13**, Terra Nova Website, at EMM0000234; Graham Statement I, ¶ 14.

40 *See infra* ¶ 92.

41 Phelan Statement I, ¶ 9; **CE-13,** Terra Nova Website, at EMM0000233 (ownership shares).

42 The remaining interest owners are their respective shares are: Norsk Hydro Canada Oil & Gas (15%), Husky Energy Operations Ltd. (12.51%), Mosbacher Operating Ltd. (3.5%), and Chevron Canada Resources (1%). **CE-13,** Terra Nova Website, at EMM0000233.

43 Phelan Statement I, ¶ 9; **CE-14**, Terra Nova Development and Operating Agreement, arts. 7, 15.

36. The principal techniques for exploration and development of offshore petroleum reserves were established many decades ago.[44] Companies engaged in offshore oil production often devote significant resources to developing improved technologies and other applied research, but because the basic production process is so well-known, they tend to undertake research only as part of ordinary business operations on an "as needed" basis when available technology is insufficient to meet specific project challenges. Where possible, existing technologies are adapted for use in new circumstances. Upstream operators do not typically undertake general R&D for the sake of innovation, such as a pharmaceutical company might do in searching for the next miracle drug.[45]

37. This is particularly true in the case of investments like the Hibernia and Terra Nova projects, which are controlled by a consortium of interest owners. Because the owners are often competitors and may not have an ongoing business relationship outside the scope of the individual projects, their collective R&D objectives are defined by specific project needs.[46] As Dr. David Montgomery, an expert in R&D in the oil and gas industry, explains:

> The economics of R&D activities in the oil and gas industry strongly suggest there will be little or no expenditure on R&D in the Projects from this point on. The project enterprises were created to pursue one specific project, and the Projects are now both in their production phases. At this point, new technological challenges are infrequent....In an ongoing enterprise, R&D expenditures might be

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[44] *See* Expert Report of W. David Montgomery, CRA International, ¶ 24 (Aug. 3, 2009) (hereinafter "Montgomery Report").

[45] *Id.* ¶ 21 ("In general, an oil and gas company's R&D portfolio is developed to support execution of that company's business strategy -- to find more oil and gas, to improve production, to refine oil and gas more efficiently, and to create new business options such as the production of alternate energy."); Graham Statement I, ¶ 8.

[46] *See* Phelan Statement I, ¶ 27.

> undertaken not only to support current operations, but also in anticipation of developing future opportunities. By way of contrast, when the Projects' crude oil production is exhausted, the Projects and their associated enterprises terminate....There is no reason for the multiple interest owners to undertake together basic research that is not related to furthering the Projects, since their only common interest is the project itself. Given the characteristics of the enterprise, the Projects will only gain value from R&D activities that are necessary to support the development and production from the Hibernia and Terra Nova oil fields.[47]

38. The Hibernia project illustrates how upstream oil producers, and particularly joint ventures, approach R&D in practice. The fundamentals of the technology used at Hibernia pre-existed the project, but the location of the reserves deep beneath the seabed in the harsh North Atlantic environment posed design and engineering challenges that required innovation.[48] As a result, the interest owners spent over $100 million on R&D in the Province in the early years of the project to develop an iceberg-resistant platform and other technologies.[49] This type of R&D is a business expense like any other incurred in the regular course of project construction and operations, and therefore is not separately budgeted for by the Hibernia or Terra Nova project operators or, to our knowledge, other upstream oil producers.[50] Once the

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47 Montgomery Report, ¶¶ 28-29.

48 Graham Statement I, ¶¶ 12-13; *supra* ¶ 22 (Hibernia location).

49 Graham Statement I, ¶ 11; Montgomery Report, ¶ 31 ("Hibernia benefited from the prior R&D that led to technology developments developed and commercialized by oilfield services companies. The Hibernia project took these techniques and technologies even further, with the gravity-based structure, iceberg protection, and extended reach drilling to record-setting distances.").

50 *See* Graham Statement I, ¶¶ 7-8; Phelan Statement I, ¶¶ 7, 27; Buchanan Statement I, ¶ 9; First Witness Statement of Rod Hutchings, ¶ 12 (hereinafter "Hutchings Statement I"); First Witness Statement of Ted O'Keefe, ¶ 13 (hereinafter "O'Keefe Statement I");

technology was proven and the project entered its production phase, R&D expenditures decreased substantially.[51]

39. This project-level approach is, of course, not necessarily comparable to how individual shareholders that participate in the projects approach R&D at the company level. Particularly in the case of larger companies with global assets and a stream of future projects, a broader research agenda, the outputs of which can be leveraged across investments, is not infrequent. For example, ExxonMobil's Upstream Research Company ("URC") performs basic research, applied research, and technology development on behalf of ExxonMobil affiliate companies that have entered into cost sharing agreements with URC, pursuant to which the affiliates share in both the risks and rewards of the research work. Each affiliate that is party to the cost sharing agreements identifies its technological needs and priorities to URC, which then develops research programs intended to meet the needs of the affiliate parties as a group.[52]

D. The Regulatory Environment Governing Development of the Oil Fields Prior to Enactment of the 2004 R&D Expenditure Guidelines

1. The Accord Acts

40. Following the discovery of petroleum reserves off the coasts of Newfoundland, the overlapping jurisdiction of the federal and provincial governments in the Canadian offshore environment gave rise to the need for a coordinated legal regime for exploitation of offshore fields in the Province. In 1985, the Governments of Canada and the Province of Newfoundland and Labrador entered into a Memorandum of Agreement on offshore oil and gas resource management and revenue sharing, known as the "Atlantic Accord."[53] The

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Montgomery Report, ¶ 29 ("production joint ventures rarely or never have provisions for R&D initiatives in the partnership agreement.").

[51] *See infra* ¶ 93.

[52] *See* Graham Statement I, ¶ 10; Phelan Statement I, ¶ 29(c).

[53] **CA-10**, The Atlantic Accord: Memorandum of Agreement Between the Government of Canada and the Government of Newfoundland and Labrador on Offshore Oil and Gas Resource Management and Revenue Sharing (Feb. 11, 1985) (hereinafter "Atlantic Accord").

federal and provincial governments enacted parallel legislation implementing this agreement, known respectively as the "Federal Accord Act" and the "Provincial Accord Act," and collectively as the "Accord Acts."[54]

41. The Accord Acts govern the conduct of petroleum development projects in the Newfoundland and Labrador offshore area and establish the Canada-Newfoundland and Labrador Offshore Petroleum Board (the "Board" or "CNLOPB") to regulate such projects.[55] The Board is composed of seven members: three appointed by the Canadian federal government; three appointed by the Province; and the Chairman of the Board, who is jointly appointed by the federal and provincial governments.[56]

42. To exploit a field in the area, a project operator must obtain approval from the Board of a "development plan" setting forth the general approach to be employed in developing an oil field,[57] as well as a "benefits plan" setting forth the preferences that the operator will give to local goods,

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[54] **CA-11**, *Canada-Newfoundland Atlantic Accord Implementation Act*, S.C., 1987, c. 3 (hereinafter "*Federal Accord Act*"); **CA-12**, *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act*, R.S.N.L. 1990, c. C-2 (hereinafter "*Provincial Accord Act*").

[55] **CA-11**, *Federal Accord Act*, s. 9; **CA-12**, *Provincial Accord Act*, s. 9; *see also* **CE-29**, CNLOPB, *About C-NLOPB: Mandate and Objectives*, http://www.cnlopb.nl.ca/abt_mandate.shtml (last visited June 10, 2009) (describing Board mandate as "To interpret and apply the provisions of the Atlantic Accord and the [Accord Acts] to all activities of operators in the Newfoundland and Labrador Offshore Area; and, to oversee operator compliance with those statutory provisions.").

[56] **CA-11**, *Federal Accord Act*, s. 10; **CA-12**, *Provincial Accord Act*, s. 10.

[57] A development plan is "a plan submitted … for the purpose of obtaining approval of the general approach of developing a pool or field as proposed in the plan." **CA-11**, *Federal Accord Act*, s. 2; **CA-12**, *Provincial Accord Act*, s. 2(e). Because approval by the Board of a development plan is considered a "fundamental decision" under the Accord Acts, approval must also be obtained from the federal and provincial Ministers of Natural Resources. **CA-11**, *Federal Accord Act*, ss. 2, 31, 139; **CA-12**, *Provincial Accord Act*, ss. 2(k), 31.

services and workers.[58] Benefits plans must outline how the operator will provide Canadians with a full and fair opportunity to participate on a competitive basis in the supply of goods and services,[59] and they must contain provisions intended to ensure that first consideration is given to goods and services available in the Province.[60]

43. Benefits plans also must "contain provisions intended to ensure that . . . expenditures shall be made for research and development to be carried out in the Province . . . ."[61] The Acts do not specify any fixed amount or percentage of revenue to be spent on R&D, nor do they specify in which phase of the project — exploration, development, or production — R&D should be undertaken. They also do not require pre-approval of individual expenditures. They require only that project proponents make some provision for expenditures on R&D, to be approved by the Board as part of the benefits plan review process, and that Canadians, and Newfoundlanders in

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[58] **CA-11**, *Federal Accord Act*, s. 45(2); **CA-12**, *Provincial Accord Act*, s. 45(2).

[59] The Accord Acts define a benefits plan as "a plan for the employment of Canadians and, in particular, members of the labour force of the Province and . . . for providing manufacturers, consultants, contractors and service companies in the Province and other parts of Canada with a full and fair opportunity to participate on a competitive basis in the supply of goods and services used in any proposed work or activity referred to in the benefits plan." **CA-11**, *Federal Accord Act*, s. 45(1); **CA-12**, *Provincial Accord Act*, s. 45(1).

[60] **CA-11**, *Federal Accord Act*, s. 45(3)(d); **CA-12**, *Provincial Accord Act*, s. 45(3)(d). Similarly, the Acts require benefits plans to contain provisions to ensure that "individuals resident in the Province shall be given first consideration for training and employment in the work program for which the plan was submitted." **CA-11**, *Federal Accord Act*, s. 45(3)(b); **CA-12**, *Provincial Accord Act*, s. 45(3)(b).

[61] **CA-11**, *Federal Accord Act*, s. 45(3)(c); **CA-12**, Provincial *Accord Act*, s. 45(3)(c). This requirement derives from Section 55 of the Atlantic Accord, which provides that "Benefits plans . . . shall provide for expenditures to be made on research and development, and education and training, to be conducted within the province. Expenditures made by companies active in the offshore pursuant to this requirement shall be approved by the Board." **CA-10**, *Atlantic Accord*.

particular, be given a full and fair opportunity to participate in that activity on a competitive basis.[62]

44. During the production phase, when oil is being extracted, project operators also must hold a valid Production Operations Authorization ("POA") from the Board.[63] POAs typically cover a period of three to five years, and a new POA must be obtained upon expiration of a prior authorization.[64] In issuing a POA, the Board may impose conditions, and it can

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[62] **CA-11**, *Federal Accord Act*, s. 45; **CA-12**, *Provincial Accord Act*, s. 45; *see also* **CE-47**, CNLOPB, Hibernia Decision 86.01, § 2.2.1 (June 18, 1986) (hereinafter "Hibernia Decision 86.01") ("Full and fair opportunity for Canadians, with first consideration for Newfoundlanders, to participate in the provision of goods, services and employment is a fundamental provision of the Atlantic Accord and its implementing legislation.").

[63] **CA-11**, Federal *Accord Act*, s. 138; **CA-12**, *Provincial Accord Act*, s. 134. For a description of the phases of an upstream petroleum project, *see supra* ¶ 35.

[64] **CE-98**, CNLOPB, Hibernia POA, June 5, 1997 – June 1, 2000; **CE-99**, Letter from H. Pike, CNLOPB, to D. Willis, HMDC (June 1, 2000) (transmitting Hibernia POA, June 1, 2000 – November 1, 2005); **CE-103**, Letter from H. Pike, CNLOPB, to T. O'Keefe, HMDC (Nov. 1, 2005) (transmitting Hibernia POA, November 2, 2005 – October 29, 2008); **CE-104**, Letter from M. Ruelokke, CNLOPB, to P. Sacuta, HMDC (Feb. 15, 2008) (transmitting Hibernia POA, October 29, 2008 – April 30, 2009); **CE-105**, Letter from M. Ruelokke, CNLOPB, to P. Sacuta, HMDC (Oct. 6, 2008) (extending Hibernia POA from April 30, 2009 – October 30, 2009); **CE-106**, Letter from H. Pike, CNLOPB, to G. Lever, Petro-Canada (July 26, 2001) (transmitting Terra Nova POA, July 26, 2001 – August 31, 2004); **CE-108**, Letter from F. Way, CNLOPB, to G. Carrick, Petro-Canada (Aug. 18, 2004) (extending Terra Nova POA until November 30, 2004); **CE-109**, Letter from F. Way, CNLOPB, to G. Carrick, Petro-Canada (Nov. 30, 2004) (extending Terra Nova POA until January 29, 2005); **CE-107**, CNLOPB, Terra Nova POA, January 27, 2005 – March 31, 2008; **CE-110**, Letter from M. Ruelokke, CNLOPB, to A. Brown, Petro-Canada (Feb. 15, 2008) (extending Terra Nova POA from March 31, 2008 to September 30, 2008); **CE-111**, Letter from M. Ruelokke & H. Pike, CNLOPB, to A. Brown, Petro-Canada, (Sept. 30, 2008) (transmitting Terra Nova POA, October 1, 2008 – September 30, 2011); **CE-112**, Letter from D. Hawkins & H. Pike, CNLOPB, to A. Brown, Petro-Canada (May 29, 2009) (transmitting amended Terra Nova POA, May 29, 2009 – September 30, 2011).

suspend or revoke a POA if an operator fails to comply with any condition on which the authorization has been granted.[65]

45. The Accord Acts provide that the Board may issue guidelines and interpretation notes with respect to the foregoing requirements.[66] Guidelines so issued are not statutory instruments under Canadian law.[67]

2. 1986 and 1987 Exploration Phase Guidelines

46. In April 1986, the Board issued its first set of guidelines governing the approval of benefits plans.[68] The guidelines also contained provisions intended to streamline pre-existing benefits-related monitoring and reporting requirements applicable to the exploration phase only. They did not contain any requirement applicable to the development or production phases. These guidelines were in place when the Hibernia Benefits Plan was approved by the Board in June 1986.[69]

47. Under the 1986 guidelines, a project operator was required to endorse and to record in its benefits plan a commitment to adhere to certain reporting requirements, including a requirement to file annual reports summarizing the

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[65] **CA-11**, *Federal Accord Act*, s. 138(5); **CA-12**, *Provincial Accord Act*, s. 134(5); *see also* O'Keefe Statement I, ¶ 22.

[66] **CA-11**, *Federal Accord Act*, s. 151.1(1); **CA-12**, *Provincial Accord Act*, s. 147(1).

[67] **CA-11**, *Federal Accord Act*, s. 151.1(2); *see also* **CA-12**, *Provincial Accord Act*, s. 147(2) (guidelines are not considered subordinate legislation). The R&D Expenditure Guidelines are, however, measures within the meaning of NAFTA Article 201. *See infra* ¶ 139.

[68] **CE-32**, Guidelines for Benefits Plan Approval and Reporting Requirements for Exploration Activities in the Newfoundland Offshore Area (hereinafter "1986 Exploration Phase Guidelines"), *attached to* Letter from T. O'Keefe, CNLOPB, to W. Abel, Mobil Oil Canada (Apr. 14, 1986).

[69] *See infra* ¶ 57.

past year's expenditures on R&D.[70] Further, as part of the prescribed format for benefits plans, a project proponent was "required to outline its proposed expenditures and activities on research and development to be carried out within the Province."[71] These guidelines did not specify a target level of spending on R&D or otherwise require the operator to commit to a particular amount of spending on R&D. They also did not require the operator to seek the Board's approval of individual R&D expenditures, or anticipate that the Board would pass judgment on the appropriateness of reporting particular activities as R&D.[72]

48. The expectation therefore was that, as usual, operators would undertake R&D only as needed in the regular course of business, and where there was a legitimate need for technological innovation or design support, they would look first to local providers as part of the procurement process.[73] This was consistent with the nature of R&D in the upstream oil and gas industry, which, as noted, typically conducts research only as needed to meet specific project needs.[74]

49. Although the instructions for preparing benefits plans suggested that "[g]uidelines for expenditure amounts, etc. [would] be developed by the Board," [75] this notion was abandoned by the time the Board issued revised exploration phase guidelines in April 1987 following consultation with

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[70] **CE-32**, 1986 Exploration Phase Guidelines, §§ 4.0, 4.2.3 ("The report should provide a summary of the past year's activities to include...R&D expenditures and activities (guidelines to be established by the Board)....").

[71] *Id.* § 3.5. The likely areas of R&D expenditure outlined in the Hibernia Benefits Plan reflect anticipated technological needs. *See infra* ¶ 60.

[72] *See* **CE-32**, 1986 Exploration Phase Guidelines, § 3.5.

[73] *See infra* ¶¶ 57-67; *see also* Graham Statement I, ¶¶ 6-9; Phelan Statement I, ¶ 11.

[74] *See supra* ¶ 36.

[75] **CE-32**, 1986 Exploration Phase Guidelines, § 3.5.

industry.[76] With regard to R&D, the new guidelines provided in full as follows:

> Section 45(3)(c) of the [Accord Acts] requires that a Benefits Plan contain provisions intended to ensure expenditures are made for research and development and education and training in the Province. The company is expected to outline its plans in this regard by describing its program and identifying the expenditure amounts.[77]

A company engaged in exploration activities also was required to submit an annual benefits report with "a description of Research and Development activities, including associated expenditures, undertaken by the company in the province[.]"[78]

50. Like the 1986 guidelines, the 1987 guidelines did not specify a target amount or percentage of revenue to be spent on R&D. Instead, they left it to the project proponent to identify potential areas of R&D activity and associated expenditures as part of the benefits plan approval process. The proponent was not required to commit in the benefits plans to a target level of R&D activity or to seek the Board's prior approval of individual expenditures. The guidelines also did not anticipate that the Board would evaluate — or provide any criteria by which it might evaluate — whether activities undertaken by the operator constitute R&D.[79]

51. In a letter forwarding the revised guidelines to Mobil Oil Canada, the Board indicated: "We now feel that the guidelines provide an effective framework for dealing with the Canada-Newfoundland benefits aspects of offshore exploration activities in the Newfoundland offshore area."[80] The 1987

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76 **CE-33**, Exploration Benefits Plan Guidelines: Newfoundland Offshore Area (hereinafter "1987 Exploration Phase Guidelines"), *attached to* Letter from T. O'Keefe, CNLOPB, to W. Abel, Mobil Oil Canada (Apr. 21, 1987).

77 *Id.* § 3.5.

78 *Id.* § 4.4; *see also id.*, Appendix C; **CE-65**, Letter from K. Whittle, CNLOPB, to E. Martin, Mobil Oil Canada (Jan. 5, 1989).

79 *See* **CE-33**, 1987 Exploration Phase Guidelines, § 3.5.

80 *Id.*, Cover Letter.

guidelines remained in effect until they were updated in 2006,[81] and hence were in place when the NAFTA was enacted in 1994 and when the Terra Nova Benefits Plan was approved by the Board in 1997.[82]

52. Because these guidelines applied only to the exploration phase, and because the Board did not promulgate guidelines applicable to the development or production phases until the 2004 R&D Guidelines, any requirements applicable to those phases prior to 2004 were established in the Accord Acts themselves or in the Board's decisions approving benefits plans.[83] The Benefits Plans for Hibernia and Terra Nova are described in Section III.A below.

E. The NAFTA and Canada's Annex I Reservation

53. When the NAFTA went into effect on January 1, 1994, it barred the Parties from imposing performance requirements such as those set forth in the Accord Acts. Article 1106(1) of the NAFTA provided that

> No Party may impose or enforce any of the following requirements, or enforce any commitment or undertaking, in connection with the establishment, acquisition, expansion, management, conduct or operation of an investment of an investor of a Party or of a non-Party in its territory:
>
> * * *

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81 **CE-34**, Exploration Benefits Plan Guidance, attached as Appendix I to Canada-Newfoundland and Labrador Benefits Plan Guidelines (Feb. 2006) (hereinafter "2006 Exploration Phase Guidelines").

82 *Infra* ¶¶ 53, 73.

83 *See* **CE-47**, Hibernia Decision 86.01, § 2.5 (Hibernia benefits reporting to be on a basis determined by the project participants and the Board); **CE-57**, CNLOPB, Terra Nova Decision 97.02, § 3.5.3 (Dec. 1997) (hereinafter "Terra Nova Decision 97.02") (per Condition 7, beginning in 1998, Terra Nova project proponent required to submit annual benefits reports addressing past and planned R&D activity).

> (c) to purchase, use or accord a preference to goods produced or services provided in its territory, or to purchase goods or services from persons in its territory[.][84]

54. Where the Parties had in place existing measures that did not conform with obligations such as Article 1106, the treaty provided an opportunity for the Parties to take reservations with respect to those measures, so long as they were specifically identified. Article 1108(1) provided that Article 1106, among other provisions, did not apply to:

> (a) any existing non-conforming measure that is maintained by
>
>> (i) a Party at the federal level, as set out in its Schedule to Annex I or III, [or]
>>
>> (ii) a state or province, for two years after the date of entry into force of this Agreement, and thereafter as set out by a Party in its Schedule to Annex I in accordance with paragraph 2...[85]
>
> * * *
>
> (c) an amendment to any non-conforming measure referred to in subparagraph (a) to the extent that the amendment does not decrease the conformity of the measure, as it existed immediately before the amendment, with Articles 1102, 1103, 1106 and 1107.[86]

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[84] **CA-3** North American Free Trade Agreement, U.S.-Can.-Mex, January 1, 1994, (hereinafter "NAFTA"), art. 1106(1); **CA-5**, NAFTA, art. 2203.

[85] **CA-3**, Article 1108(2) further provides that: "Each Party may set out in its Schedule to Annex I, within two years of the date of entry into force of this Agreement, any existing nonconforming measure maintained by a state or province, not including a local government." As discussed below, Canada is reported to have taken but has not published an Annex I reservation covering the Provincial Accord Act. *See infra* ¶ 167.

[86] **CA-3,** NAFTA, art. 1108(1). Each reservation taken pursuant to Article 1108(1) must identify the laws, regulations or

55. Apparently recognizing a conflict between the Accord Acts and its newly undertaken treaty commitments, Canada negotiated a reservation to Article 1106 for the requirement to have a benefits plan with provisions for expenditures on R&D. Canada's Schedule to Annex I, dated December 17, 1992, provided:

> 1. Under the *Canada Oil and Gas Operations Act*, the approval of the Minister of Energy, Mines and Resources of a "benefits plan" is required to receive authorization to proceed with any oil and gas development project.
>
> 2. A "benefits plan" is a plan for the employment of Canadians and for providing Canadian manufacturers, consultants, contractors and service companies with a full and fair opportunity to participate on a competitive basis in the supply of goods and services used in any proposed work or activity referred to in the benefits plan...
>
> 3. The *Canada - Nova Scotia Offshore Petroleum Resources Accord Implementation Act* and the *Canada - Newfoundland Atlantic Accord Implementation Act* have the same requirement for a benefits plan but also require that the benefits plan ensure that:
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> * * *
>
> (b) expenditures be made for research and development to be carried out in the province, and for education and training to be provided in the province[.][87]

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other measures for which the reservation is taken. A measure identified as such "means the measure as amended, continued or renewed as of the date of entry into force of [the treaty], [and] ... includes any subordinate measure adopted or maintained under the authority of and consistent with the measure[.]" **CA-6**, NAFTA, Annex I, Interpretative Note, § 2(f). Canada's reservation identifies the Federal Accord Act. **CA-7**, NAFTA, Annex I, Schedule of Canada.

[87] **CA-7**, NAFTA, Annex I, Schedule of Canada.

56. Having taken this reservation, Canada was permitted to maintain the Federal Accord Act requirement as it existed in 1994, or to amend the measure in a way that renders it more consistent with Canada's Article 1106 obligations, but not to impose a new non-conforming measure or to amend the existing measure in a way that rendered it less consistent with Article 1106.[88]

III.

CHRONOLOGY OF EVENTS

A. Approval of the Hibernia Benefits Plan and the Terra Nova Benefits Plan

1. Hibernia

57. The Hibernia Development Plan and Hibernia Benefits Plan were submitted to the Board for consideration on September 15, 1985.[89] In connection with the Board's review of the Benefits Plan, it held a series of discussions with the project proponents in order to clarify and to refine various elements.[90] At the Board's request, the proponents also submitted a Supplementary Benefits Plan elaborating certain commitments on May 28, 1986.[91] The Board approved the Benefits Plan, as enhanced by the Supplementary Plan, on June 18, 1986.[92]

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88 **CA-3**, NAFTA, art. 1108(1).

89 **CE-45**, Hibernia Benefits Plan.

90 *See* **CE-47**, Hibernia Decision 86.01, § 2.1.

91 **CE-46**, Mobil Oil Canada, Supplementary Canada/ Newfoundland Benefits Plan: Hibernia Development Project (May 28, 1986) (hereinafter "Supplementary Benefits Plan"); *see also* **CE-47**, Hibernia Decision 86.01, § 2.2.1 (explaining, with citation to the Supplementary Plan, that the Board sought and received from the project Proponent confirmation of its commitment to the "entire principle of full and fair consideration and first opportunity").

92 *See* **CE-47**, Hibernia Decision 86.01. Throughout this submission, unless otherwise specified, the term "Benefits Plan" in the context of the Hibernia project encompasses both the initial

58. Echoing the language of the Atlantic Accord,[93] the Benefits Plan undertook generally to provide Newfoundland and other Canadian industry with "a full and fair opportunity to participate on a worldwide competitive basis in the supply of goods and services to the project."[94]

59. With regard to R&D, the Plan pledged "to promote research and development in Canada for problems unique to the Canadian offshore environment[.]"[95] It noted that "Mobil promotes local and Canadian research and development by entrepreneurs and institutions who are aware of our technical problems and who have the interest and resources to develop commercial applications."[96]

60. The Plan listed potential areas for R&D activity, including:

- development of iceberg detection and management systems,
- development of sonar methods for actuating subsea valves,
- development of inspection techniques for items such as subsea flowline bundles,
- extending existing submarine manipulator technology to enable remote replacement of manifold and wellhead components, and

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Benefits Plan submitted on September 15, 1985 and the Supplementary Plan submitted on May 28, 1986.

93 Neither of the Accord Acts was enacted by the time the Hibernia Benefits Plan was submitted. In the interim, the Board exercised authority pursuant to the Atlantic Accord itself, which described the Board's duties and powers in considerable detail. *See* **CA-10**, *Atlantic Accord*, §§ 3-20.

94 **CE-45**, Hibernia Benefits Plan, § 2.1.

95 *Id.* § 2.2.

96 *Id.* § 3.5.4.

- sonic transmission of bottom hole pressure information to the sea surface.

Each of these potential research areas was based on technical project needs. The Benefits Plan did not specify any fixed amount or percentage of revenue to be spent on R&D. It also did not call for pre-approval or scrutiny of individual expenditures by the Board.[97]

61. On April 18, 1986, in response to a request by the Board, the project participants issued a Memorandum of Understanding that described "the benefits-related principles and practices [they would] be utilizing in the Hibernia Project."[98] With regard to R&D, the participants reiterated the commitment made in the Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment."[99]

62. The Supplementary Benefits Plan submitted the following month was primarily a statement of principles that contained no prescribed target for R&D spending and no obligation to obtain the Board's pre-approval of individual expenditures. The Supplementary Plan reiterated the commitment to provide full and fair opportunity to local industry,[100] and added to that a commitment, also grounded in the language of the Atlantic Accord, to "[u]tilize, *to the extent practical and cost effective*, the principle of first consideration to Newfoundland and Canada in procurement, contracting and employment policies for the project including the construction, development and operating phases."[101]

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[97] *See id.*

[98] **CE-6**, Letter from J.A. Kelly, CNLOPB, to J.E. Baugh, Mobil Oil Canada (Apr. 18, 1986), *attaching* Memorandum of Understanding: Canada/Newfoundland Benefits – Hibernia Development Project (hereinafter "Hibernia MOU").

[99] **CE-6**, Hibernia MOU, at 4.

[100] **CE-46**, Supplementary Benefits Plan, at 1.

[101] *Id.* (emphasis added); *see* **CA-10**, *Atlantic Accord*, § 2.

63. With respect to R&D, the Supplementary Plan simply pledged once again "[t]o continue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment."[102] The Supplementary Plan, like the Benefits Plan, thus contained no commitment to undertake any R&D activity except as needed in the regular course of business, and even then, the extent of the commitment to local providers was to give them priority consideration on a competitive basis.[103]

64. In the Board's Decision 86.01 approving the Benefits Plan, it noted that the primary purpose of its review was to ensure that the Plan adequately met the requirements of the Accord Acts, including that it contain provisions intended to provide a full and fair opportunity for the employment of Canadians and Newfoundlanders, in particular, and to ensure that first consideration be given to local goods and services on a competitive basis.[104]

65. The Board found that the Hibernia Benefits Plan met these requirements. "Any benefits plan," the Board wrote, "is, in large measure a commitment to principles. . . . In a general sense the Board feels that the Proponent's benefits strategy *does meet statutory requirements*."[105] Where the Board deemed additional provisions necessary to meet the requirements of the Accord Acts, it imposed specific conditions to its approval of the Benefits Plan.[106] The Board imposed no such condition with regard to R&D.[107]

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[102] **CE-46**, Supplementary Benefits Plan, at 7.

[103] *See id.*

[104] **CE-47**, Hibernia Decision 86.01, § 2.1.

[105] *Id.* § 2.0.

[106] *Id.* § 2.1 ("It is the decision of the Board that the Hibernia Benefits Plan is approved subject to the conditions noted in this Benefits Plan Decision."). For example, Condition 2 stipulated that "It is a condition of the approval of the Hibernia Benefits Plan that, prior to the start of production, the Proponent submit a training and staffing plan reflecting the maximum reasonable employment and training of residents of Newfoundland." *Id.* § 2.2.1.7. Pursuant to this condition, HMDC submitted a plan in June 1996 outlining the staffing and training protocol to be applied by HMDC and its alliance

66. Rather, the Board indicated that "the Proponent's strategy represents an excellent plan for significant participation by Canadian industry and labour in the Project."[108] The "strategy" to which the Board referred was that set forth verbatim in the Supplementary Benefits Plan.[109] As noted, the only R&D commitment made in that Plan was to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment."[110]

67. In addressing the range of regulatory options available to ensure the greatest possible benefits to Canada and the Province, the Board stated that

> It was the decision of the Board that the most effective approach would be to encourage the commitment of the Proponent to a series of basic principles. The implementation of these basic principles would, in the Board's opinion, be more effective than attempting to negotiate specific requirements for the multitude of elements of which the project will consist.[111]

Elsewhere in its Decision, the Board rejected the imposition of specific targets as a sound measure for compliance with the Accord Acts.[112]

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organizations through the production phase. **CE-49**, Hibernia Staffing and Training Plan, § 1.0 (June 1996). The condition was deemed satisfied when the plan was approved in March of 1997. *See* **CE-50**, CNLOPB, Hibernia Decision 97.01, at 36-37 (1997) (hereinafter "Hibernia Decision 97.01").

107 *See* **CE-47**, Hibernia Decision 86.01, §§ 2.0, 2.1-2.6.

108 *Id.* § 2.6.

109 *Id.*; **CE-46**, Supplementary Benefits Plan, at 6-8.

110 **CE-46**, Supplementary Benefits Plan, at 7.

111 **CE-47**, Hibernia Decision 86.01, § 2.1.

112 Specifically, with respect to the principle of full and fair opportunity to participate in the provision of goods, services and employment, the Board wrote: "While the Board's mandate is to

68. Since issuing Decision 86.01, the Board has approved amendments to the Hibernia Development Plan six times. The Benefits Plan has never been modified. Rather, in each approval of a Development Plan amendment, the Board found that the Benefits Plan was not affected, and it did not impose any further requirement or condition.[113] The Board also did not impose any condition with respect to R&D expenditures when it issued POAs for Hibernia in 1997 and 2000.[114]

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ensure that full employment opportunity is given to Canadians and especially to Newfoundlanders, *the Board does not support the establishment of specific employment goals, expressed in either absolute or percentage terms, for this project.*" *Id.* § 2.2.1.

[113] **CE-48**, Hibernia Decision 90.01, § 1.2 ("the commitments made by the Proponent in its 1985 Benefits Plan submission to the principles of full and fair opportunity and first consideration will be maintained despite the proposed changes in the project"); **CE-50**, Hibernia Decision 97.01, § 1.0 ("Since the amendments now being proposed deal with changes in the production schedule and with aspects of the project located below the seafloor, they do not affect the approved Hibernia Benefits Plan…"); **CE-51**, Hibernia Decision 2000.01, § 1.0 (2000) ("Because the application involves only a change to the average daily oil production rate approved in Decision 97.01, and does not involve any major modifications to the facilities themselves, the Board has determined that it does not effect the approved Hibernia Benefits Plan."); **CE-52**, Hibernia Decision 2003.01, at 1 (Mar. 2003) ("Because the Application involves only a change to the annual oil production rate approved in Decision 2000.01, and does not involve any major modification to the facilities themselves, it does not affect the approved Hibernia Benefits Plan."); **CE-53**, CNLOPB, Decision 2003.02: Respecting the Extension of the Ben Nevis/Avalon Appraisal Period, at 1 (Oct. 2003) (proposed amendment "does not introduce any new safety, environmental or benefits issues that are not already addressed by current approvals issued by the Board"); **CE-54**, Hibernia Decision 2006.01, at 11 (Jan. 2006) ("The Board has determined that the proposed Ben Nevis-Avalon development plan does not introduce any safety, environmental or benefits issues that are not already addressed by current approvals issued by the Board.").

[114] **CE-98**, CNLOPB, Hibernia POA, June 5, 1997 – June 1, 2000; **CE-99**, Letter from H. Pike, CNLOPB, to D. Willis, HMDC (June 1, 2000) (transmitting Hibernia POA, June 1, 2000 – November 1, 2005). The Board only began to impose such conditions in POAs after the 2004 R&D Guidelines were promulgated. *See infra* ¶¶ 118-120.

69. For their part, the federal and provincial governments similarly declined to impose additional R&D requirements when they entered into a series of agreements with the interest owners in 1988 and 1990. Financial support from the two governments had become essential to project economics after the price of oil declined unexpectedly, disturbing the fiscal regime. Accordingly, the project owners negotiated a set of agreements with the governments in which they undertook additional commitments, some related to benefits, in exchange for guaranteed loans and project subsidies, among other things.[115]

70. In July 1988, the proponents and the governments entered into a Statement of Principles to guide their efforts toward a definitive agreement. The project owners undertook various benefits commitments in exchange for financial and regulatory guarantees made by the governments. None related to R&D. With regard to procurement, the project owners simply restated their commitment to give priority to Canadians, and Newfoundlanders in particular, consistent with the Accord Acts and the Board's Decision 86.01 approving the Hibernia Benefits Plan.[116]

71. After further negotiations, the governments and the project participants entered into a set of binding agreements, including a Framework Agreement dated November 10, 1990. The federal government's authority to enter into the Framework Agreement was established by special act of Parliament.[117] Once again, the project owners agreed to various benefits commitments beyond those set forth in the Benefits Plan and the Board's Decision 86.01 approving the Plan, but the governments did not impose any further obligation with respect to R&D. The proponents simply reiterated their commitment to give a full and fair opportunity

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[115] Phelan Statement I, ¶ 16; O'Keefe Statement I, ¶ 7.

[116] **CE-7**, Statement of Principles: Hibernia Development Project, § VI(2)(a)(i) (July 1988).

[117] **CA-13**, *Hibernia Development Project Act*, 1990, c.41, s. 3. This Act was referenced in a separate reservation to Article 1106 in Canada's Schedule to Annex I.

to Canadians, and first consideration to Newfoundlanders, in the procurement process.[118]

72. In summary, at the time NAFTA came into force, the R&D obligations of the Hibernia project, pursuant to the requirements of the Accord Acts and the agreements of the Hibernia interest owners with the Board and with the Canadian and provincial governments were: (i) R&D spending was based on technical project needs; (ii) no minimum or fixed amount or percentage of money or revenue was required to be spent on R&D; (iii) the Hibernia project was not required to obtain pre-approval, by the Board or any other government agency, for R&D expenditures; and (iv) in conducting the necessary research and development in Canada to solve problems "unique" to the "Canadian offshore environment," the Hibernia project was to support local research institutions by giving priority to them and others when possible.

2. Terra Nova

73. The Terra Nova Development Plan and the Terra Nova Benefits Plan were submitted to the Board for consideration on August 5, 1996 and approved in December 1997.[119] The Benefits Plan set forth certain specific commitments as well as general principles on which those commitments were based. First among the principles was a pledge to develop the project in keeping with the Accord Acts.[120] Other principles reflected a commitment to enhance opportunities for Canadians and, in particular,

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[118] **CE-8**, Hibernia Development Project: Framework Agreement, § 7.4(a) (Nov. 10, 1990) (hereinafter "Hibernia Framework Agreement").

[119] **CE-56**, Development Application: Terra Nova Development (Aug. 5, 1996) (Canada-Newfoundland Benefits Plan appears as Section 3, hereinafter "Terra Nova Benefits Plan"); **CE-57**, Terra Nova Decision 97.02.

[120] **CE-56**, Terra Nova Benefits Plan, § 3.1 ("The proponents are committed to developing Terra Nova in Accordance with the Atlantic Accord legislation. The policies and procedures that will be developed to guide the development will embody the commitment of the Proponents to carry out the development in the spirit of the *Canada-Newfoundland Atlantic Accord Implementation Acts*.").

Newfoundlanders.[121] The Plan did not contain any specific commitment with respect to R&D activities or pre-approval of individual expenditures. It did not anticipate that the Board would pass judgment on the eligibility of particular activities as R&D.[122]

74. Prior to submitting the Benefits Plan, Petro-Canada, as project proponent, met with the Board to discuss its plans and the Board's expectations with respect to the benefits provisions of the Accord Acts. According to meeting minutes prepared by the Board, Petro-Canada specifically asked how the Board intended to apply the provisions of the Acts relating to R&D. In response, the Board instructed Petro-Canada simply to describe its policies and procedures that would provide for expenditures on R&D in the Province. The Board also encouraged — but did not require — Petro-Canada "to describe, in the Benefits Plan, the nature and current level of support to R&D in the Province (eg. C-CORE) and, to the extent possible, its future plans in this regard."[123] According to the Board's minutes, "Petro-Canada indicated that should there be any benefits undertakings agreed to with the Governments beyond the statutory requirements, they would be contained, if possible, in their Benefits Plan."[124] As noted, the Terra Nova Benefits Plan as submitted advanced general principles that would guide the project's R&D activity, but no specific plans.[125]

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[121] The Plan cautioned, however, that "the actual level of benefits flowing to domestic businesses will depend to a large degree on their ability to capture these opportunities in an internationally competitive framework." *Id.*

[122] *See id.* § 3.

[123] **CE-55**, Meeting Minutes, CNLOPB/Petro-Canada (Feb. 13, 1995). C-CORE is the Center for Cold Ocean Research, an engineering services firm based on St. John's, Newfoundland. **CE-31**, C-CORE, *About C-CORE*, http://www.c-core.ca/index.php (last visited July 28, 2009).

[124] **CE-55**, Meeting Minutes, CNLOPB/Petro-Canada, at 2 (Feb. 13, 1995).

[125] *See supra* ¶ 73.

75. Summarizing the meeting, the Board wrote in the minutes that "the Petro-Canada officials seemed to be well informed of the requirements of the Atlantic Accord Acts and the [1987 Exploration Phase] Guidelines. *To a large extent, they see the benefits requirements to be 'process' oriented rather than related to prescribed targets and outcomes.* Nevertheless, the need for an assessment of the outcomes in terms of the *potential* level and nature of benefits to Canada and, in particular, to Newfoundland seemed to be understood."[126]

76. In its Decision 97.02 approving the Terra Nova Benefits Plan, the Board reiterated the statement made in the decision approving the Hibernia Benefits Plan that "[a]ny benefits plan is, in large measure, a commitment to principles." It then cited the two fundamental principles embodied in the Accord Acts — full and fair opportunity to Canadians, and first consideration to Newfoundlanders — and found that the Benefits Plan as presented addressed those principles.[127]

77. The Board further acknowledged that "*the relevant provisions of the Accord Acts do not prescribe levels of expenditure*[.]" The Acts merely "require that the Benefits Plan contain provisions intended to ensure that expenditures are made on research and development in the Province."[128]

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[126] **CE-55**, Meeting Minutes, CNLOPB/Petro-Canada, at 2 (Feb. 13, 1995) (emphasis added). As noted, the meeting addressed the full scope of benefits covered by the Accord Acts, including but not limited to R&D. Like at Hibernia, the Board was particularly concerned about employment of local residents and therefore imposed a specific condition to its approval of the Benefits Plan. Condition 3 stipulated that "[w]ithin six (6) months of Project Sanction, the Proponent submit to the Board a comprehensive human resources plan, acceptable to the Board ... [t]he plan should provide for the maximum practicable level of participation of residents of the Province...." **CE-57**, Terra Nova Decision 97.02, § 3.3.2; *see also supra* note 106 (discussing Condition 2 to the approval of the Hibernia Benefits Plan). The Board imposed no such condition with regard to R&D.

[127] **CE-57**, Terra Nova Decision 97.02, § 1.2.

[128] *Id.* § 3.5.1 (emphasis added). The Board considered the notion that operators be obliged to fund basic research — related, for example, to environmental impacts — to be consistent with the thrust

78. The Board recognized that the Terra Nova project would entail significant R&D and training expenditures, although it was concerned not to see any such plans articulated in the Benefits Plan itself.[129] Petro-Canada apparently had identified three potential areas for R&D activity — i.e., iceberg detection, tracking and management; ice-vessel interactions; and ice-seafloor interaction — in communications with the Board related to the Benefits Plans.[130] Petro-Canada also had advised the Board that the needs of the project could be met "with existing products and services and the extension of existing technologies through appropriate R&D programs."[131] These expectations do not appear in the Benefits Plan, however.[132]

79. Despite the Board's concern, it did not impose an R&D expenditure requirement as a condition to its approval of the Benefits Plan. Instead, it required reporting. Condition 7 to the Board's approval of the Terra Nova Benefits Plan required that "[t]he Proponent report to the Board by March 31 of each year, commencing in 1998, its plans for the conduct of research and development and education and training in the Province, including its expenditure estimates, for a three-year period and on its actual expenditures for the preceding year."[133]

80. The Terra Nova Development Plan has been amended twice since the Board issued Decision 97.02. In both instances, the Board did not consider an amendment to the Benefits Plan to be necessary.[134] As with Hibernia, the Board

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of this legislative requirement. *Id.* (referencing Recommendation 51 of the Terra Nova Project Environmental Assessment Panel).

129 *Id.* §§ 1.2, 3.5.1.

130 *Id.* § 3.5.1.

131 *See id.*

132 *See* **CE-56**, Terra Nova Benefits Plan, § 3.

133 **CE-57**, Terra Nova Decision 97.02, § 3.5.3.

134 **CE-58**, CNLOPB, Terra Nova Decision 2002.01, at 2 (2002) ("Because the Application involves only a change to the annual oil production rate approved in Decision 97.02, and does not involve any major modification to the facilities themselves, the Board has determined that it does not affect the approved Terra Nova

also did not impose any condition with respect to R&D expenditures when it issued a POA for Terra Nova in 2001.[135]

81. Thus, the R&D obligations for the Terra Nova project, which came into effect after the NAFTA was enacted, were the same as those required of the Hibernia project, as summarized above in paragraph 72.

B. R&D Expenditures and Reporting to the Board

82. As noted, in the absence of guidelines applicable to the development and production phases, any reporting obligations effective during those phases were established in the Board's decisions approving individual benefits plans.[136]

83. After the Hibernia and Terra Nova benefits plans were approved and the projects moved into the development phase, the project operators had two ongoing obligations with respect to R&D: *first*, to give priority in the procurement process, on a competitive basis, to Canadians, and to Newfoundlanders in particular, if and when R&D was needed, and *second*, to submit regular benefits reports to the Board with information on R&D expenditures.[137] Neither the Accord Acts nor the Benefits Plans nor the Hibernia Framework Agreement (nor even the Exploration Phase Guidelines that were no longer applicable) established any obligation to obtain pre-approval of planned R&D expenditures or to meet a target amount.[138]

Benefits Plan nor raise any new environmental issues."); **CE-59**, CNLOPB, Terra Nova Decision 2005.03, at 11 (2005) ("no amendment to the approved Benefits Plan will be required").

[135] **CE-106**, Letter from H. Pike, CNLOPB, to G. Lever, Petro-Canada (July 26, 2001) (transmitting Terra Nova POA, July 26, 2001 – August 31, 2004). The Board only began to impose such conditions in POAs after the 2004 R&D Guidelines were promulgated. *See infra* ¶ 116.

[136] *See supra* ¶ 52.

[137] **CE-47**, Hibernia Decision 86.01, §§ 2.2.1, 2.5; **CE-57**, Terra Nova Decision 97.02, § 3.5; *see also supra* ¶¶ 58-67, 72, 73-79, 81.

[138] *Id.*; **CA-11**, *Federal Accord Act*, s. 45; **CA-12**, *Provincial Accord Act*, s. 45; **CE-8**, Hibernia Framework Agreement, art. 7; **CE-**

84. Benefits reporting pursuant to Decision 86.01 approving the Hibernia Benefits Plan began in 1990, when construction commenced.[139] During the development phase, HMDC submitted monthly reports on various benefits commitments. [140] However, such reports did not contain information on R&D expenditures, as HMDC historically did not track R&D spending except on an annual basis.[141] Starting in 1998, after the Hibernia project had moved into the production phase, the monthly reports were replaced by quarterly reports.[142] In addition, HMDC began submitting annual benefits reports summarizing benefits expenditures in the prior year, including R&D. With regard to R&D, the annual reports typically have quantified total expenditures in the Province in the prior year, and have provided a breakdown by research area of cumulative expenditures since 1990. The reports also have provided an estimate of R&D expenditures likely to be incurred in the current year and have indicated the percentage of total expenditures incurred from 1997 onward.[143]

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33. 1987 Exploration Phase Guidelines, §§ 3.5, 4.4; O'Keefe Statement I, ¶¶ 10, 14, 17.

[139] **CE-2**, Hibernia Website, at EMM0000021 (construction commenced in October 1990). Prior to 1990, HMDC submitted annual benefits reports to the Board pursuant to the 1986 and 1987 Exploration Phase Guidelines. *See* O'Keefe Statement I, ¶ 8; **CE-61**, Letter from T. O'Keefe, CNLOPB to W. Abel, Mobil Oil Canada (Jan. 7, 1987) ("[T]he Board requires that operators engaged in exploration activities in the Newfoundland offshore area submit an annual report. This report should cover post-discovery/pre-development activities in addition to exploration activities."). Consistent with the Exploration Phase Guidelines, the reports during this period contained information on R&D expenditures in the Province. *See supra* ¶¶ 46-50; **CE-62**, Hibernia 1986 Benefits Report, § d, schedule A; **CE-63**, Hibernia 1987 Benefits Report, § d, schedule A; **CE-66**, Hibernia 1988 Benefits Report, § D, attachment II; **CE-68**, Hibernia 1989 Benefits Report, § D, attachment II.

[140] O'Keefe Statement I, ¶ 9; *see, e.g.*, **CE-69**, Hibernia December 1996 Staffing and Training Report.

[141] Phelan Statement I, ¶ 14; O'Keefe Statement I, ¶ 9.

[142] O'Keefe Statement I, ¶ 10. The quarterly reporting did not address R&D expenditures. Phelan Statement I, ¶ 14.

[143] **CE-70**, Hibernia 1998 Benefits Report, § 5; **CE-71**, Hibernia 1999 Benefits Report, § 5; **CE-72**, Hibernia 2000 Benefits

In its most recent annual report, submitted in March 2009, HMDC reported R&D expenditures over $225 million through 2007.[144]

85. Benefits reporting pursuant to Decision 97.02 approving Terra Nova Benefits Plan began in 1999. At the beginning of each calendar year, Petro-Canada has submitted a report summarizing benefits expenditures in the prior year.[145] With regard to R&D, the reports have quantified total expenditures in the prior year and provided an estimate of R&D expenditures likely to be incurred in the next three-year period.[146] In its report submitted in March 2008, Petro-Canada

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Report, § 5; **CE-73**, Hibernia 2001 Benefits Report, § 5; **CE-74**, Hibernia 2002 Benefits Report, § 5; **CE-75**, Hibernia 2003 Benefits Report, § 5; **CE-76**, Hibernia 2004 Benefits Report, § 5; **CE-77**, Hibernia 2005 Benefits Report, § 5; **CE-78**, Hibernia 2006 Benefits Report, § 5; **CE-79**, Hibernia 2007 Benefits Report, § 5; **CE-80**, Hibernia 2008 Benefits Report, § 5.

[144] **CE-80**, Hibernia 2008 Benefits Report, § 5.

[145] **CE-81**, Terra Nova 1998 R&D Report; **CE-82**, Terra Nova 1998 E&T Report; **CE-83**, Terra Nova 1998 Benefits Report; **CE-84** Terra Nova 1999 R&D Report; **CE-85**, Terra Nova 1999 E&T Report; **CE-86**, Terra Nova 1999 Benefits Report; **CE-87**, Terra Nova 2000 R&D Report; **CE-88**, Terra Nova 2000 E&T Report; **CE-89**, Terra Nova 2000 Benefits Report; **CE-90**, Terra Nova 2001 Benefits Report, § 2.3; **CE-91**, Terra Nova 2002 Benefits Report, § 2.3; **CE-92**, Terra Nova 2003 Benefits Report, § 2.3; **CE-93**, Terra Nova 2004 Benefits Report, § 2.3; **CE-94**, Terra Nova 2005 Benefits Report, § 2.3; **CE-95**, Terra Nova 2006 Benefits Report, § 2.3; **CE-96**, Terra Nova 2007 Benefits Report, § 2.3; **CE-97**, Terra Nova 2008 Benefits Report. For the reports covering 1998 through 2000, Petro-Canada submitted three separate reports each year, one covering R&D expenditures, one covering E&T expenditures, and a third covering other benefits commitments. Beginning with the report covering 2001, information on R&D expenditures has been included in the Terra Nova annual benefits reports. The Terra Nova 2008 Benefits Report does not contain information on R&D expenditures, because Petro-Canada is instead preparing a separate detailed report on R&D spending for the period 2004 through 2008 in response to an inquiry from the Board. **CE-97**, Terra Nova 2008 Benefits Report, § 2.0; *see also infra* ¶¶ 122, 128-129.

[146] *See id.*; **CE-57**, Terra Nova Decision 97.02, § 3.5.3, Condition 7 ("The Proponent report to the Board by March 31 of each year, commencing in 1998, its plans for the conduct of research

reported R&D expenditures over $23.5 million through 2007.[147]

86. As described above, R&D is undertaken in the usual course of business based on technological needs, and paid for out of general operating and capital budgets pre-approved each year by the project owners.[148] The technical managers who make the decision to undertake particular R&D projects do so with a view to operating safely and efficiently, and to maintaining the integrity of the project infrastructure.[149]

87. Within HMDC, there historically was no individual or group dedicated to planning R&D activity, and no system for tracking R&D activity as it was undertaken.[150] Accordingly, in

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and development and education and training in the Province, including its expenditure estimates, for a three-year period and on its actual expenditures for the preceding year.").

[147] **CE-96**, Terra Nova 2007 Benefits Report, § 2.3. The Terra Nova 2008 Benefits Report, submitted in March 2009, does not contain information on R&D expenditures. *See supra* note 145. Petro-Canada instead plans to report 2008 R&D expenditures in a separate submission to the Board covering total R&D and E&T spending from the April 1, 2004 effective date of the Guidelines through 2008. **CE-97**, Terra Nova 2008 Benefits Report, § 2.0.

[148] *See supra* ¶¶ 35-38; Phelan Statement I, ¶ 7; Graham Statement I, ¶ 7; **CE-9**, Hibernia Field Operating Agreement, § 4.12.1.1. HMDC has a policy of support for the local community above and beyond its industrial benefits commitments. Unlike for R&D, HDMC does have a dedicated budget for charitable contributions to community institutions such as the local university. **CE-9**, Hibernia Field Operating Agreement, § 4.12.1.1 (Sept. 7, 1990); Phelan Statement I, ¶ 7.

[149] *See* Graham Statement I, ¶¶ 6-7. Consistent with the Benefits Plan, where R&D is required, HMDC looks for opportunities to involve local providers on a competitive basis. *Id.* ¶ 9; *see also supra* ¶ 83.

[150] Graham Statement I, ¶ 21; Phelan Statement I, ¶¶ 7, 14; Hutchings Statement I, ¶ 12; First Witness Statement of Andrew Ringvee, ¶¶ 4, 7 (hereinafter "Ringvee Statement I"). Because Petro-Canada manages the Terra Nova project on behalf of the working interest owners, Claimants are not in a position to comment on administrative matters related to that project.

order to determine for benefits reporting purposes what R&D activities have been undertaken and what amounts spent, HMDC has relied exclusively on data collected in connection with Canada's Scientific Research and Experimental Development ("SR&ED") tax incentive program.[151] Pursuant to the SR&ED program, businesses subject to taxation in Canada may earn tax credits for R&D undertaken in the country that will lead to new, improved, or technologically advanced products or processes. To qualify for SR&ED credit, "work must advance the understanding of scientific relations or technologies, address scientific or technological uncertainty, and incorporate a systematic investigation by qualified personnel."[152]

88. In order to identify expenditures that may qualify as SR&ED, HMDC's internal tax advisors send a communication at the beginning of every tax planning cycle soliciting information from the technical and operational managers under whose supervision R&D work may have been undertaken in the prior year.[153] Of the activities reported, the tax advisor makes a first cut, eliminating from further consideration those that do not plausibly meet the requirements of the SR&ED program.[154] An independent consultant who has advised HMDC in connection with the SR&ED program since the beginning of the project, International Technology Ventures ("ITV"), then reviews the remaining expenditures to determine which are in fact viable candidates for SR&ED credit. At the conclusion of its review, ITV compiles a portfolio of SR&ED-claimable expenditures for use by the project shareholders in preparing their tax returns.[155] Ultimately, it falls to the

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[151] *See supra* note 143; O'Keefe Statement I, ¶ 13.

[152] **CE-142**, Canada Revenue Agency, *What is the SR&ED Program?*, http://www.cra-arc.gc.ca/txcrdt/sred-rsde/bts-eng.html (last visited July 28, 2009); **CA-14**, *Income Tax Act*, 1985, c. 1 (5th Supp.), § 248(1) (Can.).

[153] *See, e.g.*, **CE-147**, E-mail from S. Coombs, ExxonMobil, to Distribution List (Mar. 15, 2004); **CE-148**, Letter from R. Hutchings, ExxonMobil, to Distribution List (Feb. 29, 2008); Hutchings Statement I, ¶ 13; Graham Statement I, ¶ 19.

[154] Hutchings Statement I, ¶ 13.

[155] Hutchings Statement I, ¶¶ 14-15. For an example of the materials prepared in concert with ITV, see **CE-149**, Sample

individual owners to claim their respective shares of the eligible expenditure total.[156] For purposes of benefits reporting, HMDC has always reported to the Board the total value of SR&ED-eligible expenditures included in the portfolio prepared for the Hibernia interest owners.[157]

89. Prior to the introduction of the 2004 Guidelines, the Board never once expressed dissatisfaction with the R&D expenditures reported by either project, nor did it pass judgment on the appropriateness of reporting particular activities as R&D. Rather, the Board accepted the R&D expenditure levels reported without apparent scrutiny or comment.[158]

90. In the very early years of the Hibernia project, the Board issued letters acknowledging receipt of annual benefits reports and confirming that they "fully [met] the requirements outlined in the Board's Exploration Benefits Plan Guidelines."[159] Over time, the Board ceased issuing such letters and simply accepted the benefits reports without comment.

Hibernia SR&ED Portfolio (1995 Projects) (May 16, 1996). Claimants rely on information provided by Petro-Canada in making SR&ED submissions related to their investments in the Terra Nova project. *See* Hutchings Statement I, ¶ 6; Buchanan Statement I, ¶ 10.

[156] Claimants have consistently claimed their *pro rata* share of the expenditures endorsed by ITV. Hutchings Statement I, ¶ 11; Buchanan Statement I, ¶ 10. [redacted] *See* **CE-144**, Hibernia SR&ED Acceptance Chart (July 2009). Although some claims rejected on audit are resolved favorably on appeal, it is difficult to assess the success rate on appeal because claims may be resolved along with other tax issues unrelated to SR&ED through a single negotiated settlement. Hutchings Statement I, ¶ 18.

[157] O'Keefe Statement I, ¶ 13.

[158] *See id.* ¶¶ 8, 9; Phelan Statement I, ¶ 15.

[159] **CE-64**, Letter from T. O'Keefe, CNLOPB, to W. Abel, Mobil Oil Canada (May 5, 1988); **CE-67**, Letter from T. O'Keefe, CNLOPB, to W. Abel, Mobil Oil Canada (May 8, 1989); *see also* **CE-60**, Letter from T. O'Keefe, CNLOPB, to W. Abel, Mobil Oil Canada (June 25, 1986).

91. HMDC has never before undertaken to report R&D expenditures above and beyond those claimed for SR&ED credit that might be viewed by the Board as eligible activity under the Accord Acts.[160] There simply has been no incentive to capture every last credit-worthy dollar, as there has been no spending target to meet under the Benefits Plan.[161]

92. As noted, the level of R&D activity undertaken to date has been significant for both projects, in particular for Hibernia, due to technological needs.[162] From 1990, when the development phase commenced for Hibernia, through 2008, HMDC reported R&D expenditures over $226 million.[163]

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[160] Prior to issuance of the 2004 Guidelines, the Board had not defined R&D. The 2004 Guidelines reflect a notion of R&D that is broader in many respects than the SR&ED definition. *See* **CE-1**, CNLOPB, Guidelines for Research and Development Expenditures, § 3.3 (Oct. 2004) (hereinafter "2004 R&D Guidelines") ("The definition of research and development, as referenced in Section 45 of the [Accord Acts], includes, but it not limited to Section 248(1) of the Income Tax Act, which defines Scientific Research and Experimental Development.... In addition to the elements included in the [SR&ED] definition, eligible R&D expenditures may extend beyond science and technology to include research in such areas as fiscal regimes, business models and socioeconomic and environmental matters."). Since promulgating the 2004 Guidelines, however, the Board has indicated an intent to depart from the definition of R&D set forth therein and to defer instead to the SR&ED definition, especially for large value projects, or perhaps even to adopt a more narrow definition than SR&ED. Phelan Statement I, ¶ 20; Hutchings Statement I, ¶ 25; *see also* **CE-140**, CAPP, CNLOPB R&D Guidelines Industry Considerations, Slide 6 (Dec. 16, 2008). In any event, because E&T is not captured in the SR&ED program, the Board must apply its own definition if it is to give credit for such expenditures. HMDC and Petro-Canada typically report on E&T expenditures in their annual reports to the Board. *See, e.g.*, **CE-80**, Hibernia 2008 Benefits Report, § 4; **CE-96**, Terra Nova 2007 Benefits Report, § 2.2.

[161] See *supra* ¶¶ 72, 81, 83.

[162] *See supra* ¶¶ 25-27, 33.

[163] **CE-143**, Hibernia SR&ED Profile (July 2009). [redacted] *See* **CE-144**, Hibernia SR&ED Acceptance Chart (July 2009).

From 1997, when the development phase commenced for Terra Nova, through 2008, Petro-Canada reported R&D expenditures over $24 million.[164] The project operators are currently in the process of determining whether additional expenditures incurred since promulgation of the 2004 R&D Guidelines may be eligible for R&D or E&T credit under the Guidelines.[165]

93. Going forward, the amount of R&D that will be required to support project operations is expected to decrease for both Hibernia and Terra Nova, because each project has advanced significantly in its life cycle. As a general rule, upstream petroleum projects require more R&D early on, when the facility is designed and constructed, than they do in the production phase, at which point the technology has largely been proven.[166] As Dr. Montgomery explains:

> [A] specific project's R&D expenditures are greatest during its early stages. The exploration and development phase of a new frontier project like Hibernia typically presents more challenges and more difficult ones at its beginning than it does later. R&D to meet these challenges is

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[164] *See* **CE-96**, Terra Nova 2007 Benefits Report, § 2.3.2 (reporting actual R&D spending from 1997 through 2007 and estimated spending in 2008). Petro-Canada has not yet reported actual expenditure data for 2008, because it plans to provide that information in response to the Board's demand for an accounting of R&D expenditures from the period 2004 through 2008. *See supra* note 145; *infra* ¶ 129. Claimants have, however, filed for SR&ED credit in relation to their investments in the Terra Nova project for 2008. By grossing up their *pro rata* shares of project-level SR&ED, Claimants' valuation expert determined that project-level R&D spending in 2008 was $0.91 million. *See* Rosen Report, Schedule 3. By comparison, Petro-Canada forecast $1 million in R&D spending for 2008 in its 2007 Benefits Report to the Board.

[165] *See infra* ¶¶ 127-129.

[166] Montgomery Report, ¶ 27; Graham Statement I, ¶ 11, 15; Ringvee Statement I, ¶ 7; **CE-129**, Email from T. Cutt, ExxonMobil, to P. Phelan et al, ExxonMobil (Aug. 1, 2003) ("The expectation of this type of R&D expenditure on mature assets seems completely unrealistic . . . We could never require even a small percentage of the R&D for the project."). For a description of the phases of an upstream petroleum development project, see *supra* ¶ 35.

> required to realize the project's commercial potential. By the time that the project has reached the production phase the early challenges have been met and new problems arise less frequently. By the time that a project is producing oil and gas on a steady basis, R&D will be required only sporadically, when new challenges are met.[167]

94. Over the next five to ten years, the R&D needs of the Hibernia and Terra Nova projects are expected to be consistent with the usual needs of offshore projects with aging facilities and declining production. R&D may include new or improved technologies to increase oil recovery from the reservoir and enhanced systems to monitor and assess the integrity of project infrastructure. In addition, Hibernia has a large secondary reservoir known as the Ben Nevis Avalon ("BNA") that is largely undeveloped due to its technical complexity and associated economic risk. New technologies likely will be required to develop the BNA economically, although the nature and amount of any work that would qualify as R&D are currently unclear.[168] As for Terra Nova, Claimants are aware that Petro-Canada, as operator, is planning to undertake research in the Province related to ship side valve isolation tooling. Petro-Canada may have additional R&D projects in mind of which Claimants are not aware.[169]

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[167] Montgomery Report, ¶¶ 25-27.

[168] Graham Statement I, ¶ 18.

[169] These projects are expected to total less than $265,000. *See* **CE-125**, R&D Work Expenditure Application Form: Sea Chest Installation Simulation, at EMM0002193 (July 7, 2009) (estimating $19,800); **CE-126**, R&D Work Expenditure Application Form: Sea Chest Cover Handling Devices, at EMM0002208 (July 9, 2009) (estimating $243,510). Petro-Canada considered undertaking another project in the Province that would have cost up to $79,000, but the Board denied credit for that expenditure under the Guidelines. It is therefore possible that Petro-Canada will proceed with its original plan to have the work done overseas. *See infra* ¶ 124; **CE-123**, R&D Work Expenditure Application Form: Tubing Hanger Crown Plugs, at EMM0002188 (June 1, 2009) (estimating $79,900 as maximum).

C. The Board Considers Imposing a New R&D Expenditure Requirement

95. Thus, the Hibernia and Terra Nova projects historically were not required to meet prescribed R&D expenditure levels or to subject their R&D spending to pre-approval by the Board. As agreed with the Board in the Benefits Plans, and with Canada and the Province in the Hibernia Framework Agreement, among others, the projects were expected to undertake R&D only as necessary, and they had to make provisions for Canadians, and Newfoundland residents in particular, to be able to compete for such work. While the NAFTA potentially may have permitted these performance requirements, because of Canada's express reservations, the NAFTA precluded any measure that would make these requirements any more onerous.[170]

96. Sometime around the end of 2001, with the NAFTA already in effect,[171] the Board began to consider imposing a new R&D spending requirement beyond that set forth in the Accord Acts. Although the origins of the new Guidelines are not fully known to Claimants, the idea appears to have emerged during consideration of a benefits plan for the White Rose project, in which Claimants are not participants. In its November 2001 decision approving the White Rose benefits plan, the Board released what it described as "a definitive statement as to how it interprets and applies the provisions of the Atlantic Accord and the [Accord Acts]."[172]

97. In its statement, the Board specifically acknowledged that, while that the Atlantic Accord and the Accord Acts contemplate opportunities being provided to Canadians and Newfoundlanders on a competitive basis, they do not require that benefits actually be delivered.

> Both require that Benefits Plans be designed to ensure that, for goods and services, opportunities are made available to Newfoundland & Labrador

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[170] *See supra* ¶¶ 54-56.

[171] *See supra* ¶ 53.

[172] **CE-35**, CNLOPB, White Rose Decision 2001.01, § 3.2 (2001) (hereinafter "White Rose Decision 2001.01").

> and Canadian participants. *There is no requirement in the Accord or the Legislation that Benefits Plans be designed to ensure that economic Benefits are delivered to Newfoundland & Labrador and Canada. This is particularly the case for goods and services, which are subject to an overriding qualification relating to market competition.*[173]

98. The Board also admitted that the Accord Acts did not impose fixed spending levels for R&D or require pre-approval of such spending. The Board noted that "*the Legislation simply requires that expenditures be made for these purposes in the Province*[.]" [174] It observed that "[t]his statutory requirement is intended to ensure *that the Proponent describes* its plans and financial commitments to R&D and E&T in the Province."[175] Of course, the place where a proponent would describe such plans is in the benefits plan.[176] While the legislation itself does not establish parameters or criteria for evaluating the proponent's R&D activity from an adequacy standpoint, the Board felt that it had latitude to establish target expenditure levels.[177]

99. The Board acknowledged that its purpose was to create demand for R&D services in the Province:

> Expenditures for research & development and education & training are viewed by the Board to be strategically important contributions to the growth and development of the research and development and education and training capacity in the Province.[178]

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[173] *Id.* § 3.2.1 (emphasis added).

[174] *Id.* § 3.2.2.3 (emphasis added).

[175] *Id.* (emphasis added).

[176] *See, e.g., supra* ¶¶ 60, 74; **CE-45**, Hibernia Benefits Plan, § 3.5.4.

[177] **CE-35**, White Rose Decision 2001.01, §§ 3.2.2, 3.3.3.3.

[178] *Id.* § 3.2.2.3.

100. An early draft of the new expenditure guidelines was framed as providing guidance exclusively in respect of Condition 3 to approval of the White Rose benefits plan, which required the proponent to "submit a plan to address the obligation in the [Accord Acts] that expenditures shall be made" for R&D and E&T in the Province.[179] The Board indicated that it would review the proponent's submission and establish an appropriate expenditure target. The Board did not suggest at this stage that it intended to establish expenditure targets applicable to projects with earlier-approved benefits plans, such as Hibernia and Terra Nova.[180]

101. The guidelines soon evolved, however, into a measure applicable to *all* operators engaged in petroleum development activities in the Province.[181] The Board acknowledged that the guidelines would impose new requirements: "*These guidelines are a first effort by the C-NOPB in this area.*"[182] It also admitted a lack of experience on

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[179] *Id.* § 3.3.3.3; **CE-36**, CNLOPB, Guidelines for Research and Development / Education and Training Expenditures: White Rose Project, § 1.0 (July 2002) (hereinafter "July 2002 Draft Guidelines").

[180] **CE-35**, White Rose Decision 2001.01, § 3.3.3.3.

[181] **CE-37**, CNLOPB, Draft Guidelines for Research and Development / Education and Training Expenditures, § 1.0 (Aug. 2002) (hereinafter "August 2002 Draft Guidelines"). A June 2003 document of unknown origin that was provided to Claimants by Respondent indicates that "[t]he writing of the White Rose Decision Report provided an opportunity for the Board to focus on the application of Section 45(3)(c) of the legislation and the need for an R&D guideline." **CE-39**, R&D Expenditures by Canadian Petroleum Companies - Draft, § 1 (June 2003). Early drafts of the guidelines indicate uncertainty as to whether they should apply to the exploration phase as well. *See, e.g.*, **CE-37**, August 2002 Draft Guidelines, § 1.0 (reference to exploration phase in bracketed text); **CE-38**, CNLOPB, Draft Guidelines for Research and Development / Education and Training Expenditures, § 1.0 (Jan. 2003) (reference to exploration phase in bracketed text). However, the June 2003 document indicates that the Board ultimately decided to make R&D voluntary during the exploration phase, in part to encourage exploration activity. **CE-39**, R&D Expenditures by Canadian Petroleum Companies - Draft, § 1 (June 2003).

[182] **CE-37**, August 2002 Draft Guidelines, § 2.0 (emphasis added).

which to base a benchmark for expenditures in a project's production phase.[183]

102. In July 2003, the Board issued a consultation draft of the guidelines and made presentations to the operators of existing projects in the Province, including Hibernia and Terra Nova.[184] Additional consultations with the operators and the Canadian Association of Petroleum Producers ("CAPP"), an industry association, continued into 2004.[185]

103. Industry representatives and CAPP objected to the proposal on a number of grounds, including that the expenditure requirement was being imposed "after the fact" and constituted an additional, substantial financial burden that upset the premise upon which decisions to proceed with projects had been based.[186] They also advised the Board on multiple occasions that the draft guidelines were out of step with business reality. They observed, for example, that:

- "Industry undertakes R&D activities to address areas where understanding and improvements are needed[,] not because of arbitrarily set targets."[187]

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[183] *Id.* § 3.2. ("In the absence of experience on which to base a benchmark for a R&D / E&T expenditures for a project's operations phase..."). The Board indicated that experience to date was that R&D and E&T expenditures during the development phase amounted to approximately 0.5% of project capital cost. *See id.* § 3.1.

[184] **CE-40,** CNLOPB, Draft Guidelines for Research and Development Expenditures (July 2003) (hereinafter "Consultation Draft"); *e.g.*, **CE-127**, Presentation by CNLOPB to HMDC (July 24, 2003); **CE-128**, Meeting Minutes, CNLOPB/HMDC (July 24, 2003).

[185] **CE-132**, Meeting Minutes, CNLOPB/Industry Representatives (Oct. 28, 2003); **CE-135**, Meeting Minutes, CNLOPB/Industry Representatives (May 11, 2004); **CE-136**, Meeting Minutes, CNLOPB/ExxonMobil (May 26, 2004).

[186] **CE-132**, Meeting Minutes, CNLOPB/Industry Representatives, at EMM00002239 (Oct. 28, 2003) ("This takes away the stability of the fiscal regime. This is a (negative) message to new entrants. It is a penalty after the fact.").

[187] **CE-133**, Letter from P. Alvarez, CAPP, to H. Stanley, CNLOPB, at EMM0002242 (Nov. 14, 2003). The observation was

- E&T are provided to safely and efficiently conduct operations.[188]

- R&D investments are leveraged by coordinating R&D activities around the world and by directing work to institutes most capable of solving particular problems.[189]

- "R&D should be needs driven rather than dollars driven."[190]

104. In explaining the appropriateness of a needs-based approach rather than prescriptive guidelines, ExxonMobil noted *inter alia* that the bulk of R&D activity required in connection with the Hibernia project had already been undertaken,[191] that there was no foreseeable benefit to the project from the heightened spending obligations that the Board was contemplating,[192] that the approved Benefits Plan

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also made that operators active in the Province, when left to their own devices, have already demonstrated good corporate citizenship by living up to, and in many cases exceeding, commitments. "Industry has been instrumental in creating an important legacy for NL through our support of the service and supply industry's research and development, improving and expanding the local research infrastructure and supporting the education and training of local residents. We are providing opportunities for the local R&D capability to increase." *Id.*

188 **CE-131A**, Letter from S. Davis, Chevron, to CNLOPB (Oct. 8, 2003).

189 *Id.*

190 *See* **CE-135**, Meeting Minutes, CNLOPB/Industry Representatives (May 11, 2004); *see also* **CE-138**, Summary of telephone conversation between G. Carrick, Petro-Canada, and F. Way, CNLOPB (June 30, 2004) ("The operators feel that R&D expenditures should be based on industry needs.").

191 **CE-135**, Meeting Minutes, CNLOPB/Industry Representatives (May 11, 2004) ("Hibernia spent $100 million on SR&ED in development phase ... not much R&D left to spend in Hibernia.").

192 **CE-136**, Meeting Minutes, CNLOPB/ExxonMobil (May 26, 2004) ("Where would HMDC get the benefit from spending $150 million on R&D?").

did not contain any R&D spending commitment,[193] and that imposition of a spending target would thus constitute a change in the regulatory regime applicable to the project.[194]

105. The Board indicated that it was open to considering alternate approaches to the benchmark but that it was not prepared to revert to a regime lacking quantifiable targets.[195] These parameters were unacceptable, and project operators were unable to recommend a viable alternate approach.[196]

D. Promulgation of the 2004 R&D Expenditure Guidelines

106. By letter dated November 5, 2004, the Board transmitted to the Hibernia and Terra Nova project operators the R&D Expenditure Guidelines. Although the Guidelines

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[193] **CE-131**, Letter from T. Cutt, HMDC, to H. Stanley, CNLOPB, at EMM0002235 (Sept. 22, 2003) ("Our primary concern relates to the Board's authority ... to impose explicit expenditure levels for [R&D] and to apply them to a project for which an approved Canada-Newfoundland benefits plan is already in-place."); *see also* **CE-130**, Letter from G. Carrick, Petro-Canada, to H. Stanley, CNLOPB, at EMM0002233 (Sept. 19, 2003) ("[W]e do not believe the C-NOPB has authority to retrospectively require commitments of R&D expenditures ... where an Operator is proceeding pursuant to an previously approved Benefits Plan.").

[194] **CE-136**, Meeting Minutes, CNLOPB/ExxonMobil, at EMM0002252 (May 26, 2004) ("...the rules have changed...").

[195] **CE-137**, Meeting Minutes, CNLOPB/Industry Representatives, at EMM0002254 (June 3, 2004) ("[O]perators should understand we are not prepared to go back to a solution which has no measure or quantifiable commitment associated with it."); *see also* **CE-139**, R&D update for the July 21 Board Meeting (July 21, 2004) ("Board members noted that they are prepared to be flexible but that the Amount is Key and Squaring-Up mechanism is a must.").

[196] *See, e.g.*, **CE-41**, Letter from F. Way, CNLOPB, to J. Taylor, HMDC, at EMM0000466 (Nov. 5, 2004) ("On October 18, 2004, industry advised that it has not been able to reach a consensus on an alternative approach.").

were dated October 2004, the letters indicated that they were effective retroactively to April 1, 2004.[197]

107. On November 16, 2004, HMDC sent a letter in response stating its position that the Board lacked authority to "impose further obligations on the Hibernia owners which exceed those embodied in the approved Benefits Plan[.]" The letter further noted that "HMDC has fully complied with all the commitments contained in its Benefits Plan, including those related to R&D, and will continue to do so." HMDC sought "assurance from the federal and provincial governments that they too [would] preserve the sanctity of agreements."[198] The Board responded on December 21, 2004, by stating that the Guidelines were "issued and in force and apply to the Hibernia Project effective April 1, 2004."[199]

108. Despite the hortatory connotations of the title, the Guidelines imposed a set of mandatory requirements above and beyond those established in the Accord Acts or the Board's decisions approving the Hibernia and Terra Nova Benefits Plans.[200] They imposed a new, formula-based R&D spending requirement applicable during the development and production phases of all offshore petroleum projects undertaken in the

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[197] *Id.* at EMM0000465; **CE-42**, Letter from F. Way, CNLOPB, to G. Carrick, Petro-Canada, at EMM0000474 (Nov. 5, 2004). The Guidelines were later attached as Appendix II to new Canada-Newfoundland and Labrador Benefits Plan Guidelines dated February 2006. *See* **CE-34**, Canada-Newfoundland and Labrador Benefits Plan Guidelines, at EMM0000369. Appendix I to the Benefits Plan Guidelines was a revised version of the Canada-Newfoundland and Labrador Exploration Benefits Plan Guidance already in place. *See id.*, Appendix I; **CE-33**, 1987 Exploration Phase Guidelines.

[198] **CE-43**, Letter from J. Taylor, HMDC to F. Way, CNLOPB, at EMM0000476 (Nov. 16, 2004).

[199] **CE-44**, Letter from F. Way, CNLOPB to J. Taylor, HMDC (Dec. 21, 2004).

[200] **CE-1**, 2004 R&D Guidelines, §§ 2, 4. The Guidelines use the term "requirement" repeatedly and clearly operate as such. *See infra* ¶¶ 156-160.

Province.[201] For individual expenditures to count toward the spending target, project operators must obtain pre-approval by the Board. The expenditure amounts dictated by the Guidelines are based not on business reality, but instead on a formula contrived by the Board as a proxy for common industry practice that in fact is deeply flawed and arbitrary.[202]

109. The Guidelines do not require any expenditures at all during the exploration phase.[203] During the development phase, operators are required to spend 0.5% of total project capital cost on R&D. Operators are then given a development phase credit in that amount to be applied against their expenditure obligations in the production phase.[204] The Guidelines do not indicate whether spending in excess of the development phase requirement will be credited in the production phase.[205]

110. Throughout the production phase, operators are required to spend a given percentage of annual revenues, determined by application of a benchmark calculated by the Board for average R&D spending, as a percentage of revenues,

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[201] Except where otherwise indicated, the term "R&D" in the context of the Guidelines encompasses E&T, or Education and Training. According to the Guidelines, qualifying E&T expenditures count toward an operator's R&D expenditure target. **CE-1**, 2004 R&D Guidelines, § 3.4.

[202] **CE-1**, 2004 R&D Guidelines, § 2.2; *see also infra* ¶¶ 113.

[203] With regard to the exploration phase, the Guidelines provide: "From 2003 on, during the exploration phase, R&D expenditures up to a maximum of 5 percent of the expenditure bid will be allowed." **CE-1**, 2004 R&D Guidelines, § 2.1. The Guidelines do not explain what this "allowance" might count toward. It does not appear as a credit toward the production phase expenditure requirement as the development phase credit does. *See id.* § 2.2.

[204] According to the Guidelines, R&D expenditures during the development phase typically amount to approximately 0.5% of total project capital cost (C). On that basis, the development phase R&D expenditure requirement (DPr&d) is calculated as follows: DPr&d = 0.005 x C. **CE-1**, 2004 R&D Guidelines, § 2.2.1.

[205] R&D expenditures at Hibernia during the development phase exceeded 0.5% of capital cost. *See* Phelan Statement I, ¶ 22.

by oil and gas companies in Canada.[206] The Board calculates the benchmark using the most recent five-year average of R&D expenditure data published by Statistics Canada. If, for example, the average of the industry benchmark data published over the most recent five-year period is 0.4% of revenues, every operator of a project in the production phase will be required to spend on R&D 0.4% of revenues generated that year. Although the Board calculates the benchmark for each single year, operators are not necessarily expected to make the required expenditures on an annual basis. The Board instead calculates expenditure requirements at the end of each POA period.[207]

111. Project operators are required to spend these amounts regardless of whether the project requires that level of R&D activity. For any POA period in which there are not sufficient projects to absorb the required level of expenditure, the balance of unspent commitments is to be placed in an R&D fund to be managed by the Board in conjunction with the operator. In a POA period where an operator overspends its R&D requirement, the excess amount may be applied against its requirement in the subsequent POA period. The Guidelines do not provide, however, for carryover past the immediately following POA period. Accordingly, operators appear to forfeit credit for amounts spent in excess of the Guidelines

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[206] The Total R&D expenditure (TRr&d) required during the development and production phase is determined by the benchmark (B), multiplied by the product of a project's total recoverable oil (RO), as defined by the approved Development Plan, and the long term oil price (LTOP): TRr&d = B x (RO x LTOP). **CE-1**, 2004 R&D Guidelines, § 2.2. The Board uses the price of Brent Crude less 10% for both Hibernia and Terra Nova. *See* **CE-116**, Letter from F. Smyth, CNLOPB, to P. Sacuta, HMDC (Feb. 26, 2009); **CE-117**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada (Mar. 3, 2009). The production phase R&D expenditure requirement (PPr&d) constitutes the difference between the Total Requirement (TRr&d) and the development phase requirement (DPr&d): PPr&d = TRr&d – DPr&d. **CE-1**, 2004 R&D Guidelines, § 2.2.2.

[207] The total expenditure commitment for the production phase is distributed in proportion to anticipated production per period covered by each Productions Operations Authorization (POA) issued by the Board. At the end of each POA period, there is a recalculation of projected spending commitments based on actual production levels and prices. **CE-1**, 2004 R&D Guidelines, § 2.2.2.

target amount in a given POA period if those amounts also exceed the expenditure requirement applicable in the next POA period.[208]

112. The Guidelines also oblige operators to obtain pre-approval of individual expenditures by making an application to the Board prior to commencement of each R&D activity that they plan to undertake.[209] The Guidelines do not set forth detailed criteria to guide the Board's evaluation, and it is uncertain how the Board will implement this requirement. As noted, the Board did not assess individual expenditures prior to issuance of the Guidelines, as there was no mandatory expenditure level to meet.[210] Failure to obtain approval under the new Guidelines presumably means that the expenditure in question will not qualify for credit toward an operator's expenditure target.[211]

113. The Guidelines acknowledge the Board's lack of experience regulating R&D expenditure levels. In particular, they explain the Board's reliance on the Statistics Canada data by noting its lack of experience on which to base a

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[208] *See id.* § 4.2.

[209] *Id.* § 4.1. An R&D Work Expenditure Application Form is attached to the Guidelines.

[210] *See supra* ¶ 89-91. Although the Board has indicated an intent to rely at least in part on CRA's evaluation of R&D expenses submitted for SR&ED credit, that reliance is practically infeasible in a pre-approval context because CRA does not assess individual expenditures until months or years after the fact. In addition, CRA does not recognize E&T expenditures as SR&ED, so the Board cannot rely on CRA's assessment of such expenditures. *See supra* note 160; *infra* note 355.

[211] Because the expenditure obligation for the period from April 1, 2004 through December 31, 2004 cannot be subject to pre-approval, the obligation for that period will be measured against the R&D expenditures reported in the annual benefits reports. *See* **CE-113**, Letter from F. Way, CNLOPB, to J. Taylor, HMDC (Feb. 18, 2005); **CE-114**, Letter from F. Way, CNLOPB, to G. Carrick, Petro-Canada (Feb. 18, 2005) (referencing instead the period April 1, 2004 through January 26, 2005). As discussed below, the Board did not enforce compliance with the Guidelines while a domestic legal challenge to their validity was pending from February 2005 until January 2009. *See infra* ¶¶ 117, 121-122.

benchmark.[212] However, several fundamental problems are caused by the use of the Statistics Canada figure in this context, which are not reconciled by the Guidelines. Among them:

- The Statistics Canada study aggregates data received in response to a survey of an undifferentiated sample set of oil and gas companies, including both upstream and downstream operators active in a variety of physical environments, both onshore and off. The R&D spending behavior of many of the companies represented in the sample set has no relevance to a mature offshore asset like Hibernia or Terra Nova, yet the Guidelines require these projects to match the spending levels of those other groups.[213]

- As a rule, the typical R&D spending behavior of offshore, upstream operators is substantially lower than that of operators engaged, for example, in onshore oil shale and tar sand mining projects. These unconventional modes of extraction are more complex than conventional oil recovery and, as relatively new technologies, require more innovation than a typical offshore operation.[214]

- Similarly, the R&D spending needs of an upstream project in the production phase of operations tend to be much lower than the needs of an upstream project in its construction phase. Yet Statistics Canada fails to

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[212] **CE-1**, 2004 R&D Guidelines, § 2.2 ("In the absence of experience on which to base a benchmark for such expenditures, the C-NOPB examined the levels of such expenditures by petroleum companies in Canada."); *see also supra* ¶ 101.

[213] Hutchings Statement I, ¶ 30; Montgomery Report, ¶¶ 37-38, 40, 42.

[214] Hutchings Statement I, ¶ 31; Montgomery Report, ¶¶ 22-23 ("These technology areas, rather than conventional oil and gas E&P [exploration and production] technologies, are where oil and gas companies spend most of their applied research and development dollars.").

distinguish between the stage in project operations of companies covered by its study.[215]

- Statistics Canada also appears to lack a mechanism to distinguish effectively between upstream operators like HMDC and downstream operators and service companies, which tend to spend more on R&D. Although its reports contain separate categories for upstream (i.e., Oil & Gas Extraction) and downstream (i.e., Petroleum Refineries) companies, it is not uncommon for companies to have both upstream and downstream operations. For those companies, Statistics Canada appears not to apportion data reported by a single company between the upstream and downstream categories. Indeed, it invites companies to consolidate data across business units when completing the survey and acknowledges that the results can be "misleading."[216]

- In each of these respects, the sample set to which Hibernia and Terra Nova are being compared is overbroad. At the same time, the sample set is under-representative and prone to distort results. Most importantly, Statistics Canada only seeks information from companies known to have performed or funded R&D in the prior year. It thus excludes from consideration all companies with no

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[215] Hutchings Statement I, ¶ 32; Montgomery Report, ¶¶ 25-27. The Board does not appear to agree with this proposition. The Guidelines posit that "R&D expenditures in the development phase of projects tend to focus primarily on education & training activities, whereas it is expected that in the production phase there will tend to be more focus on research and development." **CE-1**, 2004 R&D Guidelines, § 2.0.

[216] **CE-153**, Statistics Canada Survey, at EMM0002358 (2008); **CE-160**, Statistics Canada, Industrial Research and Development: 2008 Intentions, at 62 (2009) (hereinafter "2008 Intentions Report") ("A company can only be assigned to one industry although that company may have establishments in several industries. The assignment is based on the activity from which the firm derived the greatest portion of its income. Thus, comparisons between R&D data collected at the company level and other data collected at the establishment level ... may be misleading."); Hutchings Statement I, ¶ 30; Montgomery Report, ¶ 42.

expected R&D spending.[217] If those companies were included, the industry benchmark obviously would be far lower.[218]

- Statistics Canada does not require backup documentation to support survey responses.[219] It therefore leaves room for companies to misstate data. Indeed, Statistics Canada explicitly acknowledges that "[i]t cannot be expected that all firms funding R&D will be surveyed, will respond and will report correctly."[220] It also invites survey respondents to provide estimated data when precise figures are not available.

- When companies submit incomplete survey responses, Statistics Canada fills in the missing data itself based on other available information such as the company's prior year estimate of future R&D spending.[221] Thus, some data that forms the basis of the industry benchmark are entirely speculative. Indeed, Statistics Canada specifically states that "[t]he accuracy of the company's estimates of future expenditures has ... been a problem in the past,

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[217] Hutchings Statement I, ¶ 29; **CE-160**, 2008 Intentions Report, at 60 ("The mailing list of companies was made up of firms which had reported R&D in the previous survey, or firms claiming an R&D income tax incentive for 2006, of firms reported by government respondents as R&D contractors or grantees for 2006 to 2007, of firms reported by other companies as funders or performers of R&D, and of firms indicated in some other way, such as newspaper or journal articles or provincial directories."). Firms expected to have less than $1.5 million in R&D expenditures are not asked to complete a survey, but are instead imputed R&D spending data based on information received from CRA in connection with the SR&ED program. **CE-160**, 2008 Intentions Report, at 60-61.

[218] Montgomery Report, ¶¶ 41, 44; Hutchings Statement I, ¶ 29.

[219] *See* **CE-153**, Statistics Canada Survey (2008); Hutchings Statement I, ¶ 39.

[220] **CE-160**, 2008 Intentions Report, at 61.

[221] Hutchings Statement I, ¶ 33. Although the survey states that participation is mandatory, Statistics Canada has no power to compel compliance, and in practice the response rate is well below 100%. For example, in 2006 the response rate was 66%. *Id.*

particularly in the wells and petroleum products industries."[222]

- Although Statistics Canada defines R&D by reference to CRA's definition of SR&ED, it acknowledges that companies may apply different definitions of R&D in responding to the survey.[223]

- Reliance on SR&ED data is, in any event, problematic in that Statistics Canada issues its report before CRA has determined whether reported expenditures in fact qualify as SR&ED. When expenditures reported to Statistics Canada are later denied SR&ED credit, Statistics Canada does not appear to revise its data.[224] However, because the Board bases the Guidelines benchmark on a five-year average of Statistics Canada data, the uncorrected data continues to factor into the Board's calculations for several years.[225]

- To take account of updated information, Statistics Canada used to publish three years worth of data in each report and revise data from one year to the next. Until the data were revised, they were marked as preliminary in the report.[226] Although Statistics Canada maintains this

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[222] **CE-160**, 2008 Intentions Report, at 63. Where companies decline to provide an estimate of future R&D expenditures, Statistics Canada makes that estimate for them "based usually on the expenditure of the preceding year or a slight increase in expenditures." *Id.* at 64.

[223] *Id.* at 61 ("The term, R&D, in spite of survey guidelines, can be misinterpreted."); Montgomery Report, ¶ 44 (third bullet).

[224] Hutchings Statement I, ¶ 36.

[225] *See* **CE-1**, 2004 R&D Guidelines, § 2.2; Montgomery Report, ¶ 44 (last bullet) ("The Statistics Canada survey requires a faster turnaround [than the SR&ED program], and reports are released before numbers are official."). Failure to catch and correct survey reporting errors is also a concern. *See* Hutchings Statement I, § 39.

[226] *See* Hutchings Statement I, ¶ 37; *see also, e.g.*, **CE-156**, Statistics Canada, Industry Research and Development: 2004 Intentions, Table 12 (2005).

practice as to some data reported, it no longer publishes a revised R&D spending to revenues ratio, which is the factor relied upon by the Board. It now publishes the ratio corresponding to a given year only once, and though the ratio itself is not marked as preliminary, it appears to be based on underlying expenditure data that Statistics Canada does consider preliminary.[227]

- By the time that Statistics Canada completes its survey and publishes the results, the data are two years out of date. The benchmark therefore may not reflect R&D expenditures undertaken in a comparable market.[228]

- The benchmark is not calculated until after the end of the year for which it applies under the Guidelines. This delay makes it impossible for operators to plan expenditures to meet their spending requirements under the Guidelines.[229] This is particularly problematic at the end of a POA period, when operators are required to place any shortfall in spending from that POA period into an R&D fund to be administered by the Board.[230]

114. For all of these reasons, requiring operators to match their own R&D expenditures to the Statistics Canada benchmark factor constitutes a new, artificial spending obligation unrelated to the commercial reality that drove R&D spending prior to the Guidelines. Pursuant to their approved Benefits Plans, the Hibernia and Terra Nova project owners simply were required to accord priority consideration to local

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[227] *See* Hutchings Statement I, ¶ 38; **CE-160**, 2008 Intentions Report, Tables 7-1, 7-6; *see also id.* at 61, 63 (describing an "estimation system" put into place to impute values for data not yet available through the SR&ED program).

[228] Hutchings Statement I, ¶ 35.

[229] Phelan Statement I, ¶ 32. From 2004 through 2007, the benchmark fluctuated between 0.34% and 0.46%. *See* **CE-116,** Letter from F. Smyth, CNOLPB, to P. Sacuta, HMDC (Feb. 26, 2009). Applied to revenues in the range of $4.3 billion, as Hibernia had in 2006, the difference in the R&D expenditure requirement amounts to over $5 million a year.

[230] **CE-1**, 2004 R&D Guidelines, § 4.2.

service providers, on a competitive basis, when they determined in the usual course of business to undertake R&D. It was well understood that the research to be undertaken in the Province would address "problems unique to the Canadian offshore environment." [231] Now, under the Guidelines, operators are required to meet an externally-imposed R&D expenditure requirement that is not based on the needs of the projects, but instead on an inherently biased and unreliable metric for the average spending behavior of a range of companies, including upstream and downstream companies operating onshore and off.

E. Efforts to Enforce the Guidelines and Litigation in the Canadian Courts

115. Since issuing the Guidelines, the Board has made clear that compliance with their terms is mandatory. As discussed more fully below, the Guidelines on their face purport to establish a series of "requirements."[232] The Board has consistently demanded commitments on the part of operators to abide by the Guidelines on a going-forward basis and has demanded an accounting of past R&D expenditures with a view to enforcing compliance retroactively to the effective date of April 1, 2004.[233]

116. Shortly after promulgation of the Guidelines, the POA for Terra Nova was up for renewal. Petro-Canada, as project operator, had submitted an application for a new POA on July 14, 2004, i.e., before issuance of the Guidelines. The Board delayed action until January 27, 2005,[234] at which time it

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[231] **CE-6**, Hibernia MOU, at 4; **CE-45**, Hibernia Benefits Plan, § 2.2; **CE-46**, Supplementary Benefits Plan, at 7.

[232] *See infra* ¶¶ 157-160.

[233] *See*, *e.g.*, **CE-116**, Letter from F. Smyth, CNLOPB, to P. Sacuta, HMDC (Feb. 26, 2009); **CE-117**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada (Mar. 3, 2009).

[234] The Board extended the deadline for renewal of the POA until January 29, 2005. **CE-108**, Letter from F. Way, CNLOPB, to G. Carrick, Petro-Canada (Aug. 18, 2004) (extending Terra Nova POA until November 30, 2004); **CE-109**, Letter from F. Way, CNLOPB, to G. Carrick, Petro-Canada (Nov. 30, 2004) (extending Terra Nova POA until January 29, 2005).

granted the application subject to a set of appended conditions. Condition 15 read: "The Operator shall comply with the *Guidelines for Research and Development Expenditures* as issued by the Board November 5, 2004 and with effect from April 1, 2004." The Appended Conditions are not countersigned by Petro-Canada.[235] A project operator has no choice but to accept conditions imposed unilaterally by the Board in a POA, and cannot continue production without a valid POA.[236]

117. On February 18, 2005, the Board issued letters to HMDC (with respect to Hibernia) and Petro-Canada (with respect to Terra Nova) advising them of their obligations, as operators of the projects, under the Guidelines from the effective date of April 1, 2004 through the end of 2004. The Board assessed HMDC's commitments for those nine months at $9.16 million, and Petro-Canada's at $5.31 million.[237] In a separate letter from the Board's counsel, the Board indicated that it would not seek to enforce compliance with the Guidelines while a court proceeding by the operators challenging the legality of the Guidelines under Canadian law

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[235] **CE-107**, CNLOPB, Terra Nova Production Operations Authorization (January 27, 2005 – March 31, 2008). The current Terra Nova POA will expire on September 30, 2011. **CE-112**, Letter from D. Hawkins & H. Pike, CNLOPB, to A. Brown, Petro-Canada (May 29, 2009) (transmitting amended Terra Nova POA, May 29, 2009 – September 30, 2011).

[236] O'Keefe Statement I, ¶¶ 22-23; **CE-134**, Memorandum from F. Way, CNLOPB, to Board Members, CNLOPB, at 3 (Jan. 28, 2004) ("The POA for Terra Nova is up for 5-year renewal on August 31, 2004, and for Hibernia the 5-year renewal date is November 1, 2005. Production cannot continue until a new POA is issued."). If the Terra Nova interest owners were to refuse to accept the Board's condition and abandon the project now, they would forego extraction of approximately 136 million barrels of oil slated for production. **CE-15**, Terra Nova Production Profile.

[237] **CE-113**, Letter from F. Way, CNLOPB, to J. Taylor, HMDC (Feb. 18, 2005); **CE-114**, Letter from F. Way, CNLOPB, to G. Carrick, Petro-Canada (Feb. 18, 2005). In its letter to Petro-Canada, the Board assessed Terra Nova's expenditure obligation through January 26, 2005, whereas it assessed Hibernia's obligation through December 31, 2004. The basis for use of the January date is unclear.

was pending. The Board made clear, however, that the amounts it calculated were mandatory and would be enforced if litigation upheld the Guidelines under Canadian law.[238]

118. The Hibernia POA was due to expire on November 1, 2005. HDMC, as operator, submitted an application for a new POA on October 25, 2005. At the Board's insistence, the application included the same condition appended to the Terra Nova authorization: "The Operator shall comply with the *Guidelines for Research and Development Expenditures* as issued by the Board November 5, 2004 and with effect from April 1, 2004[.]"[239] Along with the application, HMDC submitted a protest letter in which it indicated that it was "signing and submitting the Application prescribed by the Board, subject to ... objections." Among the objections noted was HMDC's view that the Board lacked authority to impose the Guidelines.[240] HMDC also annotated the application form supplied by the Board to indicate that the application was subject not only to the Board's condition, but also to the objections stated in the protest letter.[241]

119. On October 28, 2005, the Board responded, indicating that it would not accept the application subject to the qualification noted, and directing HMDC to resubmit the application without such a provision. The Board reiterated that it did not intend to take any steps to enforce compliance with the Guidelines while the court action was pending, but noted that "HMDC assumes any risk of noncompliance while the legal proceeding is outstanding." The Board further noted that "the Guidelines are effective from April 1, 2004 and the

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[238] **CE-115**, Letter from I. Kelly, Curtis Dawe Barristers, Solicitors & Notaries, to J. Thistle, McInnes Cooper Barristers & Solicitors (Mar. 3, 2005). The court challenge is discussed below at ¶¶ 121-122.

[239] **CE-100**, Letter from J. Taylor, HMDC, to F. Way, CNLOPB, transmitting Hibernia POA Application, at EMM0002042, Condition 7 (Oct. 25, 2005).

[240] *Id.* at EMM0002038 (the letter is erroneously dated October 25, 2004).

[241] *Id.* at EMM0002041.

expenditure requirements will be determined on that basis, subject to any Order which the Court may make."[242]

120. Pursuant to the Board's directive, HMDC resubmitted its POA application without qualification on October 31, 2005.[243] In lieu of lodging its objections directly in the application, HMDC asked that a copy of its letter of October 25, 2005 and a copy of the Board's letter of October 28, 2005 be filed and attached to the POA for informational purposes to record the respective positions of HMDC and the Board.[244] The Board issued a new POA for Hibernia on November 1, 2005, effective until October 29, 2008, and attached the letters as requested.[245] That POA was twice extended and remains valid until October 30, 2009.[246]

121. As noted, the Board agreed not to enforce compliance with the conditions in the Hibernia and Terra Nova POAs while the Canadian courts adjudicated an action seeking to have the Guidelines vacated on domestic law grounds.[247] In the action, filed jointly by HMDC and Petro-Canada on

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[242] **CE-101**, Letter from F. Way, CNLOPB, to J. Taylor, HMDC, at EMM0002053 (Oct. 28, 2005).

[243] If the Hibernia owners were to refuse to accept the Board's condition and abandon the project now, they would forego extraction of approximately 386 million barrels of oil slated for production. Phelan Statement I, ¶ 28; **CE-11**, Hibernia Production Profile (2009).

[244] **CE-102**, Letter from J. Taylor, HMDC, to F. Way, CNLOPB (transmitting Hibernia POA Application) (Oct. 31, 2005).

[245] **CE-103**, Letter from H. Pike, CNLOPB, to T. O'Keefe, HMDC (transmitting Hibernia POA, Nov. 2, 2005 – Oct. 29, 2008), at EMM0002062 (Nov. 1, 2005). The Board's letter made explicit that the POA was subject only to the conditions it imposed in the application form, not the objections lodged by HMDC.

[246] **CE-104**, Letter from M. Ruelokke, CNLOPB, to P. Sacuta, HMDC (Feb. 15, 2008) (extending Hibernia POA until April 30, 2009); **CE-105**, Letter from M. Ruelokke, CNLOPB, to P. Sacuta, HMDC (Oct. 6, 2008) (extending Hibernia POA until October 30, 2009).

[247] **CE-115**, Letter from I. Kelly, Curtis Dawe Barristers, Solicitors & Notaries, to J. Thistle, McInnes Cooper Barristers & Solicitors (Mar. 3, 2005).

February 4, 2005, the operators argued under Canadian law that the Board acted in excess of its statutory authority in promulgating the Guidelines. The Board's action ultimately was upheld as a matter of Canadian law. The case did not address the international law claims at issue in this arbitration.[248]

122. The period of the Board's forbearance ended when the Supreme Court of Canada denied leave to appeal on February 19, 2009.[249] On February 26, 2009 and March 3, 2009, the Board issued letters to HMDC and Petro-Canada, respectively, advising them of their expenditure requirements under the Guidelines from the effective date of April 1, 2004 through December 31, 2008.[250] The Board assessed HMDC's obligation at $66.52 million, and Petro-Canada's at $34.04 million. The Board directed each operator to submit a report by April 30, 2009 detailing its R&D and E&T expenditures during the period in question. Both operators have requested

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[248] **CA-52**, *Hibernia and Petro-Canada v. C-NOPB*, Supreme Court of Newfoundland and Labrador Trial Division, 2007 NLTD 14 (Jan. 22, 2007). **CA-53**, *Hibernia and Petro-Canada v. C-NOPB*, Supreme Court of Newfoundland and Labrador Court of Appeal, 2008 NLCA 46 (Sept. 4, 2008).

[249] *See* **CA-54**, Judgments of the Supreme Court of Canada http://scc.lexum.umontreal.ca/en/news_release/2009/09-02-19.3//09-02-19.3.html (dismissing applications for leave to appeal).

[250] **CE-116**, Letter from F. Smyth, CNLOPB, to P. Sacuta, HMDC (Feb. 26, 2009); **CE-117**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada (Mar. 3, 2009). Comparing the application of the Guidelines formula in these letters and the Board's letters issued to HMDC and Petro-Canada in February 2005, several variables changed from one letter to another for the 2004 and 2005 expenditure periods, resulting in an increased spending requirement for both projects. *First*, the Board's earlier letters included estimates for oil price, production volume and the Statistics Canada benchmark applicable to 2005. As it turned out, the Board underestimated production volume and price and overestimated the Statistics Canada benchmark. These values were revised in the 2009 letters. *Second*, for reasons that are not evident on the face of the letters, the 2005 development phase credit was reduced by about half. *See* **CE-113**, Letter from F. Way, CNLOPB, to J. Taylor, HMDC (Feb. 18, 2005); **CE-114**, Letter from F. Way, CNLOPB, to G. Carrick, Petro-Canada (Feb. 18, 2005).

and received an extension of the reporting deadline to September 30, 2009.[251]

F. Efforts to Comply with the Guidelines Without Prejudice to NAFTA Claims

123. Because the Guidelines require spending estimated to be in excess of project needs, compliance with their terms requires a focused effort on the part of industry. Since dismissal of the Canadian court action, the project operators have been taking steps to that end.[252] They have held a series of discussions with the Board in an effort to clarify how it intends to administer the Guidelines, including, for example, what kinds of activities are likely to be eligible for credit as R&D.[253] The Board has not been able to provide a definitive answer. It has stated at times that it may base its evaluation of individual expenditures on CRA's assessment of SR&ED claims, at least for large expenditures.[254] However, it will be impossible for the Board to rely on CRA's assessment to pre-approve individual expenditures as required by the Guidelines,

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[251] **CE-120**, Letter from P. Sacuta, HMDC, to F. Smyth, CNLOPB, transmitting Preliminary Summary Report of Hibernia R&D Expenditures (2004-2008), at EMM0002127 (Apr. 30, 2009); **CE-118**, Letter from G. Vokey, Petro-Canada, to F. Smyth, CNLOPB, at EMM0002124 (Apr. 9, 2009); **CE-119**, Letter from F. Smyth, CNLOPB, G. Vokey, Petro-Canada (Apr. 29, 2009); **CE-121**, Letter from F. Smyth, CNLOPB, to P. Sacuta, HMDC (Apr. 30, 2009).

[252] Compliance by Claimants and their affiliates is without prejudice to their NAFTA claims.

[253] Hutchings Statement I, ¶ 25. Various uncertainties arise as a result of differences in the SR&ED definition of R&D and the general parameters set forth in the Guidelines. In addition, it is unclear how the Board will handle SR&ED claims that are initially rejected by CRA but are later approved on appeal. *See, e.g.*, **CE-140**, CAPP, CNLOPB R&D Guidelines Industry Considerations, Slide 6 (Dec. 16, 2008).

[254] As noted, the Board recently suggested that it may apply an even more narrow definition than that. *See supra* note 160; **CE-140**, CAPP, CNLOPB R&D Guidelines Industry Considerations, Slide 6 (Dec. 16, 2008).

because CRA typically does not render its decision on SR&ED claims until years after the expenditure has occurred.[255]

124. Thus far, of the two operators, only Petro-Canada has had occasion to submit proposed expenditures for pre-approval by the Board. Since May 2009, Petro-Canada has sought pre-approval for three R&D expenditures and one E&T expenditure. Of the R&D expenditures, the Board has so far assessed only one, an engineering and design project estimated to cost a maximum of $80,000 that would allow installment of certain equipment onshore rather than in the field. Initially, the work was slated to occur overseas, but Petro-Canada was prepared to move as much of the project as possible to St. John's if the Board would pre-qualify the expenditure. The Board denied the application, however, stating that it viewed the activity to be an application of existing technology and therefore ineligible under the Guidelines.[256] The other two R&D-related applications remain pending. The application Petro-Canada submitted for pre-approval as E&T was for a $250,000 contribution to Memorial University of Newfoundland to support research training over a period of five years. The Board approved that application.[257]

125. As project operators continue to grapple with the questions raised by the Guidelines, industry representatives have begun a dialogue among themselves geared toward identifying possible uses for unspent R&D expenditure commitments.[258] Because individual projects like Hibernia and

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[255] Hutchings Statement I, ¶ 26; *see also supra* note 210. In addition, as noted, CRA does not recognize E&T expenditures as SR&ED, although the Guidelines purport to give credit for E&T expenditures in the Province. *See supra* note 160.

[256] **CE-123**, R&D Work Expenditure Application Form: Tubing Hanger Crown Plugs, at EMM0002190 (June 1, 2009).

[257] **CE-125**, R&D Work Expenditure Application Form: Sea Chest Installation Simulation (July 7, 2009); **CE-126**, R&D Work Expenditure Application Form: Sea Chest Cover Handling Devices (July 9, 2009); **CE-124**, R&D Work Expenditure Application Form: Terra Nova Young Innovator Award (May 25, 2009).

[258] *See, e.g.*, **CE-141**, CAPP, CNLOPB R&D Guidelines, Administration of Unspent R&D Obligations, Industry Feedback to C-NLOPB (Feb. 26, 2009); **CE-140**, CAPP, CNLOPB R&D Guidelines Industry Considerations, Slides 2, 4 (Dec. 16, 2008).

Terra Nova have no legitimate business need at this stage in operations for the level of R&D contemplated by the Guidelines, operators are for the first time exploring ways to spend the funds on industry-wide endeavors situated in the Province.[259] They are also considering the possibility of individual interest owners undertaking company-level research in the Province.[260] The feasibility of the various approaches under discussion has yet to be determined, however, and it is unclear at this stage whether the kinds of spending opportunities that may arise will qualify for tax credit under the SR&ED program or a deduction from project royalties paid to the federal and provincial governments.[261]

126. In seeking to invent R&D spending opportunities substantial enough to meet the Guidelines requirements, industry representatives must contend with an apparent lack of capacity in the Province to absorb the level of expenditures required by the Guidelines.[262] As noted, the very purpose of the Guidelines was to develop the capacity of the local R&D industry.[263] Promulgation of expenditure requirements that mandate significantly increased R&D spending before that capacity exists has created the classic problem of the chicken and the egg. Without adequate human resources and infrastructure to handle the increased spending, project operators will be unable to meet their spending obligations

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[259] *See, e.g.*, **CE-140**, CAPP, CNLOPB R&D Guidelines Industry Considerations, Slides 2, 4 (Dec. 16, 2008); Ringvee Statement I, ¶¶ 5, 7, 10.

[260] Phelan Statement I, ¶ 29; Ringvee Statement I, ¶ 11; **CE-141,** CAPP, CNLOPB R&D Guidelines, Administration of Unspent R&D Obligations, Industry Feedback to CNLOPB, Slide 5 (Feb. 26, 2009); **CE-140**, CAPP, CNLOPB R&D Guidelines Industry Considerations, Slide 4 (Dec. 16, 2008).

[261] Phelan Statement I, ¶¶ 29-30; *see also infra* Part V.

[262] *See e.g.*, **CE-141,** CAPP, CNLOPB R&D Guidelines, Administration of Unspent R&D Obligations, Industry Feedback to C-NLOPB, Slide 2 (Feb. 26, 2009); **CE-140**, CAPP, CNLOPB R&D Guidelines Industry Considerations, Slide 2 (Dec. 16, 2008); Ringvee Statement I, ¶ 13; Phelan Statement I, ¶ 30; Graham Statement I, ¶ 10.

[263] *See supra* ¶ 99; *see also infra* ¶ 148.

under the Guidelines and will have no choice but to deposit the unspent amounts into a fund to be administered in accordance with the Guidelines.[264]

127. The forward-looking effort to identify spending opportunities that the operators would not undertake but for the Guidelines is separate and distinct from the ongoing effort to quantify past expenditures that may qualify for credit for credit toward the expenditure commitments assessed in the Board's letters to HMDC and Petro-Canada.[265] Pursuant to the Board's directive to supply expenditure data for the period April 1, 2004 through December 31, 2008, HMDC has been working with technical staff, owners, contractors and vendors to identify eligible amounts beyond those claimed for SR&ED credit.[266]

128. On April 30, 2009, HMDC submitted a preliminary report to the Board reflecting over $127 million in R&D expenditures, [redacted][267] It is far from clear whether HMDC will receive credit from the Board for these amounts, however. In addition to general uncertainties surrounding the application of the Guidelines, as noted, the Board has indicated an intent to follow the lead of the tax authorities, at least in part, when assessing R&D-related expenditures. [268] [redacted]

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[264] *See* **CE-1**, 2004 R&D Guidelines, § 4.2.

[265] *See supra* ¶ 122.

[266] Phelan Statement I, ¶¶ 17-19; *see also* Hutchings Statement I, ¶¶ 23-24; Ringvee Statement I, ¶¶ 16-17. Petro-Canada is also in the process of revaluating its SR&ED claims from April 2004 to 2008. **CE-118**, Letter from G. Vokey, Petro-Canada, to F. Smyth (Apr. 9, 2009).

[267] **CE-120**, Letter from P. Sacuta, HMDC, to F. Smyth, CNLOPB, transmitting Preliminary Summary Report of Hibernia R&D Expenditures (2004-2008), at EMM0002131 (Apr. 30, 2009). The preliminary report did not include expenditure data for 2008. 2008 data collected thus far are included in a chart prepared by HMDC subsequent to its submission of the preliminary report. **CE-143**, Hibernia SR&ED Profile.

[268] *See supra* notes 160, 254.

[redacted][269] [redacted][271] CRA has not yet audited claims filed for 2007 and 2008.[272]

129. Petro-Canada is engaged in a similar effort to compile expenditure data from the 2004 through 2008 period. So far as Claimants are aware, Petro-Canada has not yet submitted any data to the Board.

130. Until the Board is able to provide clear parameters as to how it will administer the Guidelines, it will be difficult to quantify the cost of Claimants' compliance. However, based on the best available information and using conservative estimates wherever assumptions are required, Claimants estimate the combined cost of compliance throughout the remaining life of the Hibernia and Terra Nova projects to be \$189 million. Claimants' share of that extra burden, in present value terms, is approximately \$65 million.[273]

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269 *See* **CE-151**, Letter from J. Muir, CRA, to R. Hutchings, HMDC, at EMM0002334, 2345-46 (Jan. 14, 2008); Phelan Statement I, ¶ 20; Hutchings Statement I, ¶ 17. These figures assume 100% acceptance of claims submitted in 2007 and 2008, as they have not yet been audited. **CE-144**, Hibernia SR&ED Acceptance Chart.

270 Graham Statement I, ¶ 15; Hutchings Statement I, ¶ 17; Phelan Statement I, ¶ 20.

271 Hutchings Statement I, ¶ 18.

272 **CE-144**, Hibernia SR&ED Acceptance Chart.

273 *See infra* Part V.

IV.

THE GUIDELINES VIOLATE CANADA'S OBLIGATIONS UNDER THE NAFTA

131. The record establishes each of the elements necessary to compel an award in favor of the Claimants in this case. First, it establishes the Tribunal's jurisdiction to hear and to decide these claims. Second, it shows that the R&D Expenditure Guidelines constitute a performance requirement that violates Canada's obligations under Article 1106(1), and that the measure is not exempted by Article 1108(1) or Canada's Annex I reservation for the Federal Accord Act. It also shows that Canada violated the minimum standard of treatment guaranteed to Claimants by Article 1105(1). Finally, the record demonstrates that the Claimants are entitled to approximately $65 million in damages. Each element is addressed in turn below.

A. The Tribunal Has Jurisdiction to Decide These Claims

132. The Tribunal has jurisdiction over this dispute. Each of the requirements of jurisdiction — *rationae personae*, *materiae* and *temporis* — is amply satisfied on the record.

1. The Tribunal Has Jurisdiction Over the Parties

133. Articles 1116 and 1117 of the NAFTA permit an investor of a Party to bring a claim itself, or on behalf of an enterprise of another Party that is a juridical person that the investor owns or controls directly or indirectly, for loss or damage arising out of a breach of Section A of Chapter 11 by the other Party.

134. Article 1139 defines an investor of a Party to include a national or enterprise of a NAFTA Party that seeks to make, is making or has made an investment. Article 201 defines enterprise as any "entity constituted or organized under applicable law, whether or not for profit, and whether privately-owned or governmentally-owned, including any corporation, trust, partnership, sole proprietorship, joint venture, or other association," and an enterprise of a party as "an enterprise constituted or organized under the law of a Party."

135. Each of the Claimants is an enterprise organized under the laws of the State of Delaware in the United States, and therefore is an investor of the United States as defined by the treaty. Through intermediary holding companies, each of the Claimants controls interests in the Hibernia and Terra Nova projects in Newfoundland, Canada. Those interests are directly or indirectly held by entities organized under the laws of Canada: ExxonMobil Canada Properties, ExxonMobil Canada Hibernia Company Ltd., Murphy Oil Company Ltd., and Murphy Atlantic Offshore Oil Company Ltd.[274] Each of these entities qualifies as an enterprise owned or controlled, directly or indirectly, by a Claimant within the meaning of Article 1117(1).

136. Claimants therefore fall within the Tribunal's jurisdiction *rationae personae* under Articles 1116 and 1117. As a Party to the NAFTA, Canada is also subject to the jurisdiction of the Tribunal under those Articles.[275] The Tribunal therefore has jurisdiction over each of the parties to the arbitration.

2. The Tribunal Has Jurisdiction Over the Subject Matter of the Dispute

137. As noted above, Articles 1116 and 1117 of the NAFTA permit investor claims pertaining to loss or damage arising out of a breach of Section A of Chapter 11. Under Article 1101, Chapter 11 applies to measures adopted or maintained by a Party relating to investors of another Party and to their investments in the territory of the Party adopting or maintaining the measure.[276]

138. Article 1139 defines "investment" to include *inter alia* an enterprise, interest in an enterprise that entitles the owner to share in income or profits of the enterprise, interest in an enterprise that entitles the owner to share in the assets of that enterprise, or interest arising from the commitment of

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[274] *See supra* Part II.A.I.

[275] *See supra* ¶¶ 19-20.

[276] Where Article 1106 is implicated, the Chapter also applies in relation to all investments in the territory of the Party. **CA-3**, NAFTA, art. 1101(1)(c).

capital or other resources in the territory of a Party to economic activity in such territory. Annex 201.1 of the NAFTA defines "territory" with respect to Canada as "the territory to which its customs laws apply, including any areas beyond the territorial seas of Canada within which, in accordance with international law and its domestic law, Canada may exercise rights with respect to the seabed and subsoil and their natural resources." As noted, each of the Claimants controls interests in the Hibernia and Terra Nova projects in Newfoundland, Canada. Through those interests, they are entitled to share in the income, profits, and assets of the projects as well as any interests arising from their commitment of capital or other resources to the projects.[277] Their interests in the Hibernia and Terra Nova projects therefore constitute investments within the meaning of Article 1139.

139. Article 201 defines a measure to include "any law, regulation, procedure, requirement or practice[.]" The R&D Expenditure Guidelines, promulgated by the Board in 2004 pursuant to its authority under the Accord Acts, set out the requirements, procedures and practices to be used by the Board in regulating the investments. Decisions by the Board conditioning the issuance of regulatory authorizations, including POAs for the Hibernia and Terra Nova oil fields, on compliance with the Guidelines are requirements imposed by the Board. The Guidelines and the Board's decisions constitute measures within the meaning of Article 201.

140. The claims made in this arbitration concern losses and damages incurred by Claimants and their affiliates in relation to Canada's breach of Articles 1106(1) and 1105(1) of the NAFTA. Each of these provisions falls within Section A of Chapter 11, as contemplated by Articles 1116 and 1117.

141. For the foregoing reasons, the Tribunal has jurisdiction *rationae materiae* over this dispute.

3. The Dispute Meets the Temporal Requirements of the NAFTA

142. Under Article 2203 of the NAFTA, the treaty has been in force for both the United States and Canada since January 1, 1994. The measures at issue — namely, the 2004

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[277] *See supra* Part II.A.1.

R&D Expenditure Guidelines and efforts by the Board to require compliance with their terms — were implemented well after the NAFTA entered into force.

143. In Chapter 11 of the NAFTA, Canada agreed to submit to arbitration of disputes pertaining to the substantive obligations undertaken therein. Claimants accepted this offer in their Request for Arbitration, which was received by the ICSID Secretary-General on November 1, 2007. This acceptance formed an agreement to arbitrate on that date.[278] Claimants' Request was timely received by the Secretary-General within the three-year period of limitations established in the treaty.[279]

144. The record thus amply establishes the Tribunal's jurisdiction *rationae temporis*.

B. The Guidelines Violate NAFTA Article 1106(1)'s Prohibition on Performance Requirements

145. Article 1106(1) of the NAFTA prohibits the imposition and enforcement of performance requirements. It provides that

> No Party may impose or enforce any of the following requirements, or enforce any commitment or undertaking, in connection with the establishment, acquisition, expansion, management, conduct or operation of an investment of an investor of a Party or of a non-Party in its territory:
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> * * *
>
> (c) to purchase, use or accord a preference to goods produced or services provided in its

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[278] *See* **CA-3**, NAFTA, art. 1122(2); *see also id.*, art. 1137(1).

[279] **CA-3**, Articles 1116(2) and 1117(2) of NAFTA state that an investor may not make a claim if more than three years have elapsed between the time when the investor first knew or should have known of the alleged breach and the time when the claim is brought. The Request for Arbitration was made within three years of the promulgation of the Guidelines and the Board's efforts to enforce their terms.

> territory, or to purchase goods or services from persons in its territory[.]

The imposition of the R&D Expenditure Guidelines requiring investors to spend a fixed percentage of project revenues on R&D in the Province and enforcement of this requirement by the Board both breach Canada's obligations under Article 1106(1).

146. The starting point for the Tribunal's analysis is Article 31(1) of the Vienna Convention on the Law of Treaties, which requires interpretation of a treaty "in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose."[280] On its face, Article 1106(1) prohibits NAFTA Parties from imposing or enforcing a requirement to purchase R&D services or goods in the territory, or to accord a preference to R&D services or goods provided in the territory.

147. Performance requirements are measures imposed on investors by the host State "as conditions for allowing the investment or for granting [the investor] certain privileges."[281] They commonly compel investors to accord a preference to local goods or services or to make expenditures in the territory of the host State. As the United Nations Conference on Trade and Development ("UNCTAD") has explained:

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[280] **CA-9**, Vienna Convention on the Law of Treaties, May 23, 1969, 1115 U.N.T.S. 31 (entered into force January 27, 1980), art. 31(1); *see also* **CA-18**, *Archer Daniels Midland Co. v. United Mexican States*, ICSID Case No. ARB(AF)/04/05, Award of November 21, 2007, ¶ 220 ("[T]he starting point for interpreting article 1106[] is Article 31(1) of the Vienna Convention on the Law of Treaties."); **CA-44**, *S.D. Myers Inc. v. Government of Canada*, (UNCITRAL) Partial Award of November 13, 2000, ¶ 202 ("In interpreting the NAFTA, the tribunal must start by identifying the plain and ordinary meaning of the words in the context in which they appear and also must take due account of the object and purpose of the treaty."). The objectives of the NAFTA are set forth in Article 102(1).

[281] **CA-59**, Meg N. Kinnear et al., *Article 1106*, in *Investment Disputes Under NAFTA: An Annotated Guide to NAFTA Chapter 11*, at 5 (Kluwer 2006) (citation omitted).

> Performance requirements are stipulations, imposed on investors, requiring them to meet certain specified goals with respect to their operations in the host country. They are and have been used by developed and developing countries ... to enhance various development objectives.[282]

Performance requirements are prohibited by the NAFTA because they subjugate the business judgment of foreign investors to the development goals of the host State and, in so doing, create investment and trade distortions. Indeed, as one of the American negotiators of Chapter 11 has explained:

> The [Article 1106] prohibition on performance requirements serves two goals. First, it eliminates trade distortions that arise from the imposition of performance requirements .... Second, it ensures a degree of entrepreneurial autonomy: sourcing and sales decisions are based on the investor's judgment, not by the dictates of the host government.[283]

148. The R&D Expenditure Guidelines run afoul of this prohibition by design. Indeed, the Board candidly admitted on the face of the Guidelines its intent to compel artificial investor demand for R&D in order to grow that sector of the provincial economy:

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[282] **CA-65**, UNCTAD, *Foreign Direct Investment and Performance Requirements: New Evidence from Selected Countries*, UNCTAD/ITE/IIA/2003/7, at 2 (2003); *see also* **CA-61**, Barton Legum, *Understanding Performance Requirement Prohibitions in Investment Treaties*, in *Contemporary Issues in International Arbitration and Mediation*, at 53 (June 2007) (performance requirements "require foreign investments to perform in a certain manner to meet host State investment policy objectives").

[283] **CA-62**, Daniel Price, *An Overview of the NAFTA Investment Chapter: Substantive Rules and Investor-State Dispute Settlement*, 27 INT'L LAW 727, 729 (1993) (cited as authority in **CA-59**, Kinnear, *Article 1106*, at 10-11); *see also* **CA-59**, Kinnear, *Article 1106*, at 7 ("The main rationale for prohibiting performance requirements in trade and investment agreements is that their use distorts trade and investment flows.").

> Expenditures for research & development and education & training are viewed by the Board to be strategically important contributions to the growth and development of the research and development and education and training capacity in the Province.[284]

By requiring project operators to undertake R&D activity that they otherwise would not, the Board substitutes its own development objectives for the business judgment of investors and, in so doing, distorts investment flows in favor of the Province. This type of regulation is precisely what the NAFTA prohibits.

149. While Article 1106 has been raised in several previous cases under the NAFTA, the jurisprudence on the Article is of limited usefulness here for two reasons. First, and with one exception, investors in other cases asserted Article 1106 as an ancillary claim, with claims under other articles taking center stage and receiving the most attention from the tribunals.[285] Second, and again with that same exception, the

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[284] *See supra* ¶ 99.

[285] *See* **CA-44**, *S.D. Myers*, ¶¶ 238-257, 270-278 (concluding after detailed analysis that Canada was in breach of Article 1102, but rejecting after two paragraphs of analysis claim under Article 1106); **CA-41**, *Pope and Talbot Inc. v. Government of Canada*, (UNCITRAL) Interim Award of June 26, 2000, ¶¶ 41-44, 45-80, 81-105 (investor presented claims under Articles 1102, 1105 and 1110 as well as 1106; Tribunal addressed Articles 1102 and 1105 in separate Award on the Merits of Phase 2 of April 10, 2001, ¶¶ 30-104, 105-185); **CA-23**, *Corn Products International Inc. v. United Mexican States*, ICSID Case No. ARB(AF)/04/01, Decision on Responsibility of January 15, 2008, ¶¶ 80, 81-94, 95-143 (investor's main claims raised under Articles 1102 and 1110; Article 1106 claim addressed in a single paragraph); **CA-18**, *ADM*, ¶¶ 185-213, 214-227, 228-252 (primarily addressing claims under Articles 1102 and 1110, Article 1106 was ancillary). The one exception is **CA-16**, *ADF Group Inc. v. United States of America*, ICSID Case No. ARB(AF)/00/1, Award of January 9, 2003, ¶¶ 150-174. In that case, it was undisputed that the "Buy America" measure at issue constituted a performance requirement within the meaning of Article 1106. The case centered on whether the measure fell within the exception for government procurement in Article 1108 of the NAFTA. As a result, however, the tribunal had little occasion to consider the ambit of Article 1106 or the other exceptions in Article 1108.

requirements identified by investors in earlier cases did not on their face fall within the terms of Article 1106 — leaving the tribunals to consider more creative theories, such as whether the impact of the requirement at issue was tantamount to a prohibited performance requirement.[286] By contrast, the R&D Guidelines by their terms plainly do impose a local content requirement prohibited by Article 1106(1).

150. As discussed more fully below, the Guidelines in practice will operate precisely as the Board intended. The Guidelines will compel the Hibernia and Terra Nova project participants to spend millions more dollars per year on R&D activities than they otherwise would.[287] Because there is no business need for the level of R&D mandated by the Guidelines, project operators will have to fabricate ways to spend enough money to satisfy the Board's development objectives. Where there is a lack of opportunity or capacity in the Province to absorb the excess spending, the interest owners will simply have to give the money away.[288] The Guidelines will force an additional $189 million in R&D spending throughout the remaining life of the Hibernia and Terra Nova projects, of which Claimants' *pro rata* share is approximately $71.1 million.[289]

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[286] **CA-44**, *S.D. Myers*, ¶ 275 (finding that record did not establish existence of prohibited requirement, noting that "it cannot take into consideration any limitations or restrictions that do not fall *squarely* within the requirements listed in Articles 1106(1) and (3)") (emphasis added); **CA-23**, *Corn Products*, ¶ 80 (noting that investor "freely admits that its claim is without precedent," rejecting Article 1106's application given that "[n]o requirement was imposed on CPI by the tax enacted by the Mexican Congress"); **CA-41**, *Pope and Talbot I*, ¶¶ 75, 80 (The investor argued that the Government of Canada had violated Articles 1102, 1110 and 1106. The tribunal considered the first two claims but concluded that the investor did not make out a valid claim under Article 1106 and that the government's export control regime did not impose any restrictions or limitations on domestic sales.); *cf.* **CA-18**, *ADM*, ¶¶ 224-227 (upholding Article 1106 claim, finding that although measure was not itself a prohibited requirement it had effects equivalent thereto).

[287] *See infra* ¶ 183.

[288] *See supra* ¶ 126; **CE-1**, 2004 R&D Guidelines, § 4.2.

[289] *See infra* ¶¶ 183, 219.

151. There can be no question that a requirement to undertake R&D expenditures in the Province in excess of what investors would otherwise spend constitutes a performance requirement within the meaning of Article 1106(1) Expenditures on R&D invariably entail the purchase of services from experts engaged to study technical and design challenges and to develop viable solutions. They also may entail (though to a much lesser extent) the purchase of goods as needed to support those services.[290] Indeed, the Board has acknowledged that the kinds of benefits that project proponents must address in their benefits plans — including those benefits subject to an overriding qualification relating to market competition, like R&D — involve the purchase of services and goods.[291]

152. Although no NAFTA tribunal has had occasion to consider the question, UNCTAD has issued reports on at least two occasions classifying requirements to conduct R&D as performance requirements. One such report stated that "[p]erformance requirements may include, amongst others, requirements ... to undertake research and development (R&D) in the host country...."[292] The other classifies R&D requirements as a performance requirement, and explains that one reason for the lack of arbitral awards on the issue may be that "[m]andatory applications of R&D requirements ... appear to be rare."[293] This report was cited as authority by Canada's former counsel and the current Secretary-General of ICSID.[294]

153. Canada recognized that a requirement to provide for expenditures on R&D in the Province constituted a prohibited performance requirement within the meaning of the NAFTA when it took an Annex I reservation to its Article 1106

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[290] *See* Graham Statement I, ¶ 6.

[291] *See supra* ¶ 97.

[292] **CA-64**, UNCTAD, *International Investment Agreements in Services*, UNCTAD/ITE/IIT/2005/2, at 35 (2005).

[293] **CA-65**, UNCTAD, *Foreign Direct Investment and Performance Requirements: New Evidence from Selected Countries*, UNCTAD/ITE/IIA/2003/7, at 28-29 (2003).

[294] *See* **CA-59**, Kinnear, *Article 1106*, at 6, n.21.

obligations for the Federal Accord Act. In an interpretative note at the beginning of Annex I, the NAFTA sets out how the text of the reservations included in the Parties' Schedules are to be interpreted. That note provides as follows: "The Schedule of a Party sets out ... the reservations taken by that Party with respect to existing measures *that do not conform* with obligations imposed by ... Article 1106 (Performance Requirements)[.]"[295] There can be no other explanation for the fact or form of Canada's reservation.

154. The interpretative note to Annex I further provides that a Party must describe the "*non-conforming aspects* of the existing measures for which the reservation is taken[.]"[296] In describing the aspects of the Federal Accord Act that do not conform with Article 1106, Canada referred to the R&D expenditure requirement separately from the basic requirement to have a benefits plan. Comparing the Federal Accord Act to another statute covered by the same reservation, Canada emphasized that:

> [T]he Canada - Newfoundland Atlantic Accord Implementation Act [has] the same requirement for a benefits plan *but also require[s] that the benefits plan ensure that ... expenditures be made for research and development to be carried out in the province, and for education and training to be provided in the province*[.][297]

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[295] **CA-6**, NAFTA, Annex I, Interpretative Note, § 1 (emphasis added).

[296] **CA-6**, NAFTA, Annex I, Interpretative Note, § 2(g) (emphasis added); *see also id.* § 1 ("The Schedule of a Party sets out, pursuant to Articles 1108(1)..., the reservations taken by that Party with respect to existing measures *that do not conform* with obligations imposed by ... (d) Article 1106 (Performance Requirements)....") (emphasis added); **CA-3**, NAFTA, art. 1108(1) ("Articles 1102, 1103, 1106 and 1107 do not apply to: (a) any existing *non-conforming measure* that is maintained by (i) a Party at the federal level, as set out in its Schedule to Annex I or III...") (emphasis added).

[297] **CA-7**, NAFTA, Annex I, Schedule of Canada (emphasis added).

By highlighting the R&D component of the legislation in this manner, Canada acknowledged that a requirement to provide for R&D expenditures is itself inconsistent with Article 1106.[298]

155. The R&D expenditure requirement imposed by the Guidelines is unquestionably "in connection with the ... management, conduct or operation" of the investments at issue in this arbitration.[299] As described above, the Board conditioned the right to operate the Hibernia and Terra Nova projects, in which Claimants hold substantial interests, on compliance with the Guidelines. The project operators therefore have no choice but to comply. To do so, they must spend considerably more in the "management, conduct or operation" of the projects, make fundamental adjustments to their business practices, including adoption of a new spending protocol, and obtain pre-approval of individual R&D expenditures by the Board.[300]

156. There also can be no question that the Guidelines constitute a requirement within the meaning of Article 1106(1). Although their title — "Guidelines" — may connote hortatory exhortations, the Tribunal's task in applying Article 1106(1) is to consider the substance of the measure, not only its label.[301] Every available indicator, including their text, functionality and purpose, makes clear that the Guidelines establish compulsory obligations.

157. The word "requirement" appears multiple times throughout the Guidelines. Section 2.0 is captioned "Required

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[298] Because Claimants' claims are under Article 1106(1), not Article 1106(3), the terms of Articles 1106(3) and 1106(4) have no direct application here.

[299] *See* **CA-3**, NAFTA, art. 1106(1).

[300] *See supra* ¶¶ 123-126; Ringvee Statement I, ¶¶ 5-7. For Hibernia, HMDC also must create a new staff position wholly dedicated to identifying opportunities to achieve the level of spending mandated by the Guidelines, and it may have to undertake additional compliance costs, such as hiring third party advisers to support these efforts. *See* Ringvee Statement I, ¶¶ 5-6.

[301] **CA-44**, *S.D. Myers*, ¶ 273 ("[I]n applying Article 1106 the Tribunal must look at substance, not only form.").

Expenditure Commitments." Section 2.2.2 concerning expenditure targets in the production phase uses the word "requirement" five times, including three times in the phrase "production phase R&D expenditure requirement."[302]

158. Section 4.2 on Expenditure Management further provides for deposit of unspent expenditure commitments into an R&D fund in the event that there are not sufficient projects to absorb "the required level of expenditure" in a given POA period. When an operator "overspends its R&D requirement, the excess may be applied against its requirement in the subsequent POA period." The obligation to transfer unspent amounts to an R&D fund to be managed by the Board consistent with the Guidelines further establishes that the expenditure levels set forth in the Guidelines are in fact mandatory. If they were not, there would be no need or use for such a fund.

159. The Board's actions to enforce the terms of the Guidelines confirm that they operate as a requirement. Although the Board agreed not to require compliance while the Canadian courts considered a challenge to the Guidelines under domestic statutory law, it has since dismissal of that action issued letters to HMDC, on behalf of Hibernia, and Petro-Canada, on behalf of Terra Nova, demanding an accounting of R&D expenditures during a four-year period covered by the Guidelines. In each letter, the Board referred repeatedly to the operator's expenditure "requirements" and "obligation[s]."[303]

160. Moreover, the Board already has required each project operator to commit to compliance with the Guidelines as a condition to issuance of a POA. In the case of Terra Nova, the Board unilaterally appended such a condition to the application for a POA; no signature by the operator submitting the application was requested.[304] In the case of Hibernia, the operator lodged a protest to the imposition of the condition in

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[302] The word also appears once in the slightly abbreviated phrase "production phase expenditure requirement."

[303] **CE-116**, Letter from F. Smyth, CNLOPB, to P. Sacuta, HMDC (Feb. 26, 2009); **CE-117**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada (Mar. 3, 2009).

[304] *See supra* ¶ 116.

question, and the Board refused to act on the application until it was resubmitted without the objection noted. Had either operator refused to abide by the Board's condition, it would have risked denial of a POA and termination of production operations.[305] The Board's demand that the operators agree to comply with the Guidelines as a condition to issuance of a POA constitutes imposition of a requirement and enforcement of a commitment or undertaking in connection with the investments in the Hibernia and Terra Nova projects.

161. In sum, the R&D Expenditure Guidelines clearly constitute performance requirements prohibited by Article 1106(1), imposed and enforced in connection with the Claimants' investments.

C. The R&D Expenditure Guidelines Are Not Exempted by Article 1108(1) or Canada's Annex I Reservations

162. For the reasons set forth above, Claimants have established a prima facie case that the R&D Expenditure Guidelines violate Article 1106(1) of the NAFTA. The breach is in fact so evident that Claimants expect the debate in this arbitration to focus not on their case, but instead on Canada's defense. For that reason, Claimants anticipate here a defense not yet formally raised that the R&D Expenditure Guidelines are somehow covered by Canada's Annex I reservation for the Federal Accord Act. In so doing, Claimants do not in any way assume the burden of proof or persuasion of this defense, which rests with Canada.[306]

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[305] *See supra* ¶¶ 116, 118-120.

[306] *See, e.g.*, **CA-24**, *In the Matter of Cross-Border Trucking Services*, Final Report of the Panel of February 6, 2001, ¶ 285 ("A Party asserting that a measure is subject to an exception under the [NAFTA] shall have the burden of establishing that the exception applies.") (emphasis omitted); **CA-29**, *Feldman v. Mexico*, ICSID Case No. ARB(AF)/99/1, Award of December 16, 2002, ¶ 177. Model rules of procedure promulgated pursuant to NAFTA Article 2012(1) to govern Chapter 20 arbitrations locate the burden of proof with a Party that asserts the applicability of an exception to the treaty for a non-conforming measure. *See* **CA-67**, Model Rules of Procedure for Chapter Twenty of the North American Free Trade Agreement, ¶ 34 ("A Party asserting that a measure is subject to an exception under the Agreement shall have the burden of establishing that the exception applies."). There is no reason why the burden of

163. Article 1108(1) creates a limited exception to Article 1106 for certain measures already in existence when the NAFTA became effective, provided they are covered by a Party reservation to the treaty in Annex I. As a NAFTA panel interpreting other Annex I reservations found, "reservations to treaty obligations are to be construed restrictively."[307] For the reasons that follow, Claimants respectfully submit that Canada will be unable to establish that Article 1108(1) applies to the R&D Expenditure Guidelines.

164. Article 1108(1) provides that Article 1106, among other provisions, does not apply to:

> (a) any existing non-conforming measure that is maintained by
>
> (i) a Party at the federal level, as set out in its Schedule to Annex I or III, [or]
>
> (ii) a state or province, for two years after the date of entry into force of this Agreement, and thereafter as set out by a Party in its Schedule to Annex I in accordance with paragraph 2[308]
>
> * * *
>
> (c) an amendment to any non-conforming measure referred to in subparagraph (a) to the extent that the amendment does not decrease the conformity of the measure, as it existed immediately before the amendment, with Articles 1102, 1103, 1106 and 1107.

165. A Party may amend a covered measure, but only if the amendment renders the measure more consistent with the

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proof should be any different in an investor-State case than in a State-State case.

[307] *See* **CA-24**, *Cross-Border Trucking*, ¶ 237.

[308] **CA-3**, Article 1108(2) adds: "Each Party may set out in its Schedule to Annex I, within two years of the date of entry into force of this Agreement, any existing nonconforming measure maintained by a state or province, not including a local government."

treaty (the so-called "ratchet rule").[309] As Canada itself has explained in its Statement on Implementation of the NAFTA, "existing, non-conforming measures may not be amended to be made more restrictive in the future, and once liberalized may also not be made more restrictive."[310] In other words, the measures listed in Annex I are "subject to a 'standstill' (i.e., they can only be liberalized and not made more restrictive)."[311]

166. According to the interpretative note to Annex I, each reservation taken pursuant to Article 1108(1) must "identify[y] the laws, regulations or other measures ... for which the reservation is taken."[312] A measure identified as such "means the measure as amended, continued or renewed as of the date of entry into force of [the treaty], ... [and] includes any subordinate measure adopted or maintained under the authority of and consistent with the measure[.]"[313] A description of the measure must set out the "non-conforming aspects of the existing measures for which the reservation is taken[.]"[314] These requirements show the NAFTA Parties' intent that Article 1108(1) reservations be interpreted narrowly.

167. Canada's reservation identifies the Federal Accord Act. It does not identify the Provincial Accord Act. As an initial matter, unless Canada has taken a separate reservation for the Provincial Accord Act, that Act on its face violates the NAFTA.[315] Although Canada is reported to have taken a

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[309] *See, e.g.*, **CA-60**, Kinnear, *Article 1108*, at 13 ("This is the so-called 'ratchet rule': a measure may not be made more restrictive and, if liberalized may not later be made more restrictive.") (citation omitted).

[310] **CA-56**, Department of External Affairs, *NAFTA: Canadian Statement on Implementation*, 128 Canada Gazette 68, at 150, Pt. 1 (1994).

[311] **CA-57**, Department of External Affairs and International Trade of Canada, *NAFTA, What's It All About?*, at 62 (1994).

[312] **CA-6**, NAFTA, Annex I, Interpretative Note § 2(f).

[313] *Id.*

[314] *See id.* § 2(g).

[315] *See* **CA-3**, NAFTA, arts. 1108(1)(a)(ii), 1108(2).

reservation grandfathering all existing non-conforming measures of provincial governments,[316] Canada has not made any such reservation available to the public, and Claimants are not in a position to evaluate it. Reliance by Canada on any reservation regarding the Provincial Accord Act would be inconsistent with the transparency obligations imposed by the NAFTA.[317]

168. In any event, the reservation that Canada took to Article 1106 for the Federal Accord Act does not cover the R&D Expenditure Guidelines for three reasons. *First*, the Guidelines are not an "existing non-conforming measure" within the meaning of Article 1108(1)(a). *Second*, the Guidelines are not an amendment to an "existing non-conforming measure" covered by Canada's Annex I exception. *Third*, even if the Guidelines could be considered an amendment, they fail the "ratchet rule" prescribed by Article 1108(1)(c), because they impose a more restrictive performance requirement than the measure as it existed immediately prior to the supposed amendment.

1. The R&D Expenditure Guidelines Are Not an Existing Non-Conforming Measure

169. The R&D Expenditure Guidelines plainly are not an "existing non-conforming measure" within the meaning Article 1108(1)(a). Article 201 of the NAFTA defines the term "existing" to mean "in effect on the date of entry in force of this Agreement." The Guidelines were adopted by the Board in November 2004 and thus were not in existence when the NAFTA came into effect in 1994. The Guidelines therefore were not — and could not have been — covered by Canada's Annex I reservations for "*existing* non-conforming measure[s]."[318]

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316 *See* **CA-60**, Kinnear, *Article 1108*, at 13.

317 *See* **CA-4**, NAFTA, art. 1802(1) ("Each Party shall ensure that its laws, regulations, procedures and administrative rulings of general application respecting any matter covered by this Agreement are promptly published or otherwise made available in such a manner as to enable interested persons and Parties to become acquainted with them.").

318 **CA-3**, NAFTA, art. 1108(1) (emphasis added).

2. The R&D Expenditure Guidelines Are Not an Amendment to an Existing Non-Conforming Measure

170. Article 1108(1)(c) provides a further exemption for amendments to existing non-conforming measures listed in Annex I. As noted, a measure identified as such "means the measure as amended, continued or renewed *as of the date of entry into force of [the treaty]*, ... [and] includes any subordinate measure adopted or maintained under the authority of and consistent with the measure[.]"[319] To qualify as an amendment within the meaning of the treaty, the R&D Expenditure Guidelines therefore would have to constitute an amendment to a measure listed in Canada's Schedule to Annex I or a subordinate measure adopted thereunder as of the January 1, 1994 effective date of the NAFTA. Specifically, they would have to constitute an amendment to (i) the Accord Acts themselves, (ii) the 1987 Exploration Benefits Plan Guidelines issued pursuant to the Board's authority thereunder, or (iii) Decision 86.01 approving the Hibernia Benefits Plan.[320] They plainly do not.

171. As an initial matter, the Guidelines do not on their face purport to constitute an amendment of any of these measures or, for that matter, any other measure. They cite the Accord Acts as the source of the Board's authority to issue guidelines and interpretation notes with respect to the administration and interpretation of Section 45. Rather unremarkably, they do not at the same time purport to amend the Accord Acts. By contrast, elsewhere in the NAFTA, the Parties made clear that by "amendment" they had in mind a measure that specifically and explicitly purported to modify a measure already in effect.[321] On their face, the R&D

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[319] **CA-6**, NAFTA, Annex I, Interpretative Note, § 2(f) (emphasis added). Annex I is dated December 17, 1992. Defining measure to include amendments, continuations or renewals "*as of the date of entry into force of this Agreement*" (emphasis added) ensured that the Annex would be current as of the effective date of the treaty.

[320] In 1994, the Terra Nova project was still in the exploration phase. Only the Hibernia Benefits Plan had been approved.

[321] *See, e.g.*, **CA-7**, NAFTA, Annex I, Schedule of Canada (listing series of measures explicitly modifying earlier measures); **CA-47**, *Softwood Lumber Cases (Canfor Corporation v. United*

Expenditure Guidelines are not an amendment within the meaning of Article 1108(1).

172. Even if the Guidelines purported to amend the Accord Acts, they would not have that effect. The Accord Acts are statutory instruments promulgated by the federal and provincial legislatures. Although the Board has authority to issue guidelines and interpretation notes, [322] the Acts specifically provide that guidelines issued pursuant to this authority are not statutory instruments.[323] A non-legislative instrument obviously cannot amend statutory law.

173. It is also clear that the R&D Expenditure Guidelines do not qualify as an amendment to the 1987 Exploration Benefits Plan Guidelines. As noted, the two measures are substantively distinct. The 1987 Exploration Benefits Plan Guidelines address the preparation of benefits plans and reporting during the exploration phase of petroleum projects,[324] while the 2004 R&D Expenditure Guidelines establish expenditure targets applicable to the development and production phases.[325]

States of America and Terminal Forest Products Ltd. v. United States of America), Decision on Preliminary Question of June 6, 2006, ¶¶ 292-346 (accepting that Byrd Amendment, which expressly modified earlier enacted legislation, was an "amendment" for purposes of the NAFTA).

[322] **CA-11**, *Federal Accord Act*, s. 151.1(1); **CA-12**, *Provincial Accord Act*, s. 147(1).

[323] **CA-11**, *Federal Accord Act*, s. 151.1(2); *see also* **CA-12**, *Provincial Accord Act*, s. 147(2) (guidelines are not considered subordinate legislation).

[324] According to the 1987 Exploration Phase Guidelines, the guidelines are applicable to companies "engaged in petroleum exploration activities." **CE-33**, 1987 Exploration Phase Guidelines, § 1.0. Although the Hibernia project proponent continued to submit annual benefits reports pursuant to the 1987 guidelines after the Board approved the Benefits Plan, this was because the project had not yet been sanctioned and thus was engaged only in pre-development activities at the time. *See supra* note 139.

[325] Although the R&D Expenditure Guidelines contain a provision relating to the exploration phase, the impose no mandatory requirements with respect to that phase. *See supra* ¶ 109.

174. As noted, an early draft of the 2004 R&D Expenditure Guidelines conceded that *"[t]hese guidelines are a first effort by C-NOPB in this area."*[326] The Board also acknowledged a lack of experience on which to base a benchmark for expenditures — experience that was lacking because the Board had never before attempted to regulate R&D expenditures in the production phase.[327] The Guidelines plainly represent an addition, not an amendment, to the regulatory framework applicable to the oil fields when the NAFTA took effect.

175. Furthermore, for the 2004 R&D Expenditure Guidelines to constitute an amendment to the 1987 Exploration Benefits Plan Guidelines, they would have had to modify or supplant the 1987 Guidelines in whole or in part. They did not do so. For a short time, both instruments were in place simultaneously. Then, in 2006, when the Board issued Benefits Plan Guidelines for the first time, it also issued revised Exploration Benefits Plan Guidance, which *does* constitute an amendment to 1987 Exploration Benefits Plan Guidelines.[328]

176. The 2004 R&D Expenditure Guidelines and the 2006 Exploration Benefits Plan Guidance now coexist as two separate instruments, each attached as an appendix to the 2006 Benefits Plan Guidelines.[329] Thus, neither measure can plausibly constitute an amendment of the other. Indeed, if the 2004 R&D Expenditure Guidelines amended the 1987 Exploration Benefits Guidelines, then the 2006 Exploration

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[326] **CE-37**, August 2002 Draft Guidelines, § 2.0; *supra* ¶ 101.

[327] **CE-37**, August 2002 Draft Guidelines, § 3.2. The Board had not regulated the development phase either, but had some notion of typical R&D expenditures during that phase based on the experience of existing projects. *See id.* § 3.1.

[328] Like the 1987 version, the 2006 Exploration Benefits Plan Guidance contains an obligation to submit an annual benefits report describing the R&D activities, including associated expenditures, undertaken by the company in the Province. **CE-34**, 2006 Exploration Phase Guidelines, § 5.2.

[329] The Exploration Benefits Plan Guidance is attached as Appendix I. The 2004 R&D Expenditure Guidelines are attached as Appendix II.

Benefits Plan Guidance — as the later in time instrument — would supplant the 2004 R&D Expenditure Guidelines and nullify Claimants' obligations altogether.

177. Finally, if an argument is to be made that the R&D Expenditure Guidelines constitute an amendment to the Board's decisions approving the Hibernia Benefits Plan, that argument is easily dismissed.[330] The Guidelines are an instrument of general applicability, born out of the Board's consideration of *another* project's benefits plan.[331] In contrast, the Board's decision approving the Hibernia Benefits Plan pertains solely to that project. Each type of instrument is lodged in a separate section of the Board's website.[332] Benefits plans and the Board's decisions approving them are, moreover, the result of a collaborative process between the operator and the Board, unlike the Guidelines which were promulgated over repeated objections by the operators.[333] Throughout the course of the projects, the operators and the Board have negotiated various amendments to the Hibernia Development Plans, and on each occasion, the Board has determined that the Benefits Plan does not require amendment.[334] The Guidelines too were promulgated without modification to the Benefits Plans.

178. In sum, the 2004 Guidelines cannot fairly be viewed as an amendment to measures existing at the time of the entry into force of the NAFTA in 1994.

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[330] Even if post-1994 guidelines or decisions approving benefits plans could be viewed as amendments to the pre-existing measure covered in Annex I (which they certainly cannot), Decision 97.02 approving the Terra Nova Benefits Plan in 1997 would represent a continuance or a liberalization of the pre-existing measure that Canada cannot now render more restrictive. *See infra* ¶¶ 179-181.

[331] *See supra* ¶ 96.

[332] *Compare* CNLOPB, *Legislation & Guidance: Guidelines*, http://www.cnlopb.nl.ca/leg_guidelines.shtml (last visited July 29, 2009); CNLOPB, *Reports & Publications, Decision Reports*, http://www.cnlopb.nl.ca/news/decisions.shtml (last visited July 29, 2009).

[333] *See supra* ¶¶ 57, 74, 103-106.

[334] *See supra* ¶¶ 68, 80.

3. Even if the Guidelines Could Qualify as an Amendment, They Decrease Conformity with Article 1106 and Thus Are Not Exempted

179. Even assuming *arguendo* that the R&D Expenditure Guidelines could qualify as an amendment within the meaning of the NAFTA, they would nonetheless be outside the reach of Article 1108(1)(c), because they decrease the conformity of the Federal Accord Act regime with Canada's Article 1106 obligations. To qualify for an Article 1108(1)(c) exemption, an amendment must "*not decrease* the conformity of the measure, as it existed immediately before the amendment[.]"[335]

180. The Guidelines are unquestionably less consistent with Canada's Article 1106 obligations than the Accord Acts or any other measure in place immediately prior to promulgation of the Guidelines. As noted, the full scope of obligations incumbent on the Hibernia and Terra Nova operators before issuance of the Guidelines was (1) to undertake R&D spending only as required by project needs, (2) to give priority in the procurement process to Canadians, and to Newfoundlanders in particular, on a competitive basis, if and when R&D was needed in the usual course of business, and (3) to submit regular benefits reports to the Board with information on R&D expenditures.[336] There was no obligation to meet a target amount or to obtain pre-approval of planned expenditures.

181. The Guidelines are more restrictive in every respect. First and foremost, they impose a continuing obligation to meet a formula-based expenditure target determined by the Board. Expenditure levels are no longer guided by business needs. Where projects are unable to meet the inflated expenditure targets imposed by the Board — an eventuality likely to result for Hibernia and Terra Nova, as upstream, offshore projects in fairly advanced stages of production[337] — operators are

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[335] **CA-3**, NAFTA, art. 1108(1)(c) (emphasis added).

[336] *See* **CE-47**, Hibernia Decision 86.01, §§ 2.2.1, 2.5; **CE-57**, Terra Nova Decision 97.02, § 3.5.

[337] As noted above, a project typically has less need for R&D in the production phase of operations than in the construction, or development, phase. *See supra* ¶ 93.

required to place the shortfall into a fund to be administered by the Board. That is, they are required to give money away. Failure to comply will result in revocation of the operator's authorization to maintain its investment.[338] Second, project operators are required to seek pre-approval by the Board for contemplated R&D expenditures in order for such expenditures to count toward their spending target under the Guidelines.[339] Each of these requirements goes far beyond a simple obligation to give priority to local providers and to report to the Board at a general level after the fact.

182. The Board has candidly acknowledged that the new requirements were intended to impose a more burdensome performance requirement than the pre-existing measure did. As noted, the Board developed the new Guidelines to drive growth of the local R&D industry.[340] It wanted project operators to purchase more R&D services and goods in the Province than they otherwise would. While the Accord Acts and the Hibernia and Terra Nova Benefits Plans only required operators to give priority to local providers on a competitive basis, the Guidelines seek to ensure that operators spend money in the Province irrespective of commercial realities or competitive advantage. The Guidelines effectively write the competitive basis standard out of the pre-existing measure.[341]

183. In practice, the Guidelines will have precisely the distorting effect that the Board intended. They will oblige the owners of projects, including Hibernia and Terra Nova, to spend millions more dollars per year on R&D than they otherwise would. Indeed, as the damages calculation set forth in Part V below shows, Hibernia and Terra Nova will need to spend approximately $189 million more than they otherwise would have in order to meet the expenditure requirements

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[338] Were the Board to revoke a current POA or refuse to renew a POA on account of the Guidelines, Claimants might have a separate claim for expropriation under the NAFTA.

[339] *See supra* ¶ 112.

[340] *See supra* ¶ 99.

[341] *See* **CA-11**, *Federal Accord Act*, s. 45(2); **CE-47**, Hibernia Decision 86.01, § 2.2.1; **CE-57**, Terra Nova Decision 97.02, § 1.2.

established by the Guidelines.[342] Of that amount, Claimants together will be responsible for $71.1 million, based on their *pro rata* ownership shares in the investments.[343]

184. Despite the Board's claim to tie expenditure targets under the Guidelines to common industry practice, these expenditure levels are in fact arbitrary. The benchmark factor incorporated in the Guidelines is based on survey data collected by Statistics Canada that was not intended for use in this context and is susceptible to overstatement due to myriad flaws in the methodology. As noted, among many problems Statistics Canada fails to distinguish between companies operating in non-comparable sectors of the industry with disparate business needs for R&D. While the operators agreed that they would undertake R&D as necessary for the projects in the unique offshore environment of Newfoundland, the benchmark includes a significant quotient of onshore projects such as oil shale and tar sands efforts in Western Canada.[344] The required benchmark percentage also fails to distinguish between projects in the early stage of operations, when most R&D is needed, and other projects such as Hibernia and Terra Nova that are well into their production phases and have little need for R&D at this stage.[345]

185. Because Statistics Canada excludes from consideration all companies not known to perform or fund R&D, the R&D spending ratio that it reports is obviously distorted. Insofar as Statistics Canada imputes missing data, it acknowledges the inherent unreliability of that approach. Statistics Canada also does not appear to revise the data applied by the Board to reflect CRA's ultimate assessment of SR&ED claims on which most reported R&D expenditure data are based. Even so, it publishes the data no earlier than two years after the fact, so that a company forced to match its R&D expenditure ratio to the most recently available data may have

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[342] *See infra* ¶ 219 (last two bullets).

[343] *See infra* ¶ *219*; *see also supra* ¶¶ 8, 16, 18 (describing Claimants' respective ownership interests in the Hibernia and Terra Nova projects).

[344] *See* Hutchings Statement I, ¶ 31.

[345] *See supra* ¶ 113.

to undertake that spending in a non-comparable market environment.[346]

186. The Board's reliance on the Statistics Canada data also introduces business uncertainty. Because the Board must wait for Statistics Canada to publish its data each year, the Board cannot calculate the benchmark factor applicable to a given year until the end of that year.[347] The R&D expenditure requirement applicable to a particular year or period covered by a POA therefore cannot be calculated until the end of that time period. As a result, operators cannot effectively plan their expenditures to meet the expenditure targets established by the Guidelines. In some cases, they may end up overspending without the possibility of a credit in a future POA period. In other instances, they may come up short and have to make payments to the fund.[348]

187. The organizational changes compelled by the Guidelines underscore that they are forcing a paradigm shift within the operator companies. For the first time ever, operators are forced to approach R&D expenditures from a regulatory standpoint rather than a business needs standpoint. Given the complexities involved, HMDC feels that it needs to dedicate a new staff position to development of new systems for tracking R&D activity and identification of projects on which required expenditure amounts might be spent.[349]

188. The requirement in the Guidelines to obtain the Board's pre-approval of individual expenditures also entails greater restrictions than the prior regime. As an initial matter, the need to seek Board input into what historically was a business decision can hamper operations, particularly if a decision is delayed. More importantly, however, the pre-approval component means that the Board will independently assess the suitability of particular expenditures and in its own

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346 *See id.*

347 In view of the time it takes Statistics Canada to conduct and publish its study each year, the survey data employed by the Board is two years out of date. *See id.*

348 *See supra* ¶ 111.

349 Ringvee Statement I, ¶¶ 5-6.

discretion may deny credit toward the operator's expenditure target.

189. The Guidelines provide that

> The Operator shall file an R&D and E&T Expenditure Application Form (see attached form) for each R&D and E&T activity it plans to undertake. The form shall be submitted to and reviewed by the Board for approval, prior to commencement of the activity.[350]

The Expenditure Application Form requires the operator to describe the proposed activity, state the amount to be expensed, and designate the phase of the project in which the activity will be conducted, among other things.[351] The Guidelines state that the Board will undertake to review the application within five days of receipt and notify the operator of its determination in writing.[352] Presumably, individual expenditures must be approved by the Board through this process in order to qualify for credit toward an operator's spending target under the Guidelines.

190. As noted, of the two project operators, only Petro-Canada has experience to date with the pre-approval process. In 2009, it made three applications for R&D expenditure approvals and one application for an E&T expenditure approval. Thus far, the Board has only considered one of the

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[350] **CE-1**, 2004 R&D Guidelines, § 4.1.

[351] The Expenditure Application Form is attached to the end of the Guidelines. **CE-1**, 2004 R&D Guidelines, at EMM0000007.

[352] The Board appears not to meet this five-day goal. As far as Claimants are aware, the Board has not yet issued a decision on a set of applications filed by Petro-Canada approximately one month ago. *See* **CE-125**, R&D Work Expenditure Application Form: Sea Chest Installation Simulation (July 7, 2009); **CE-126**, R&D Work Expenditure Application Form: Sea Chest Cover Handling Devices (July 9, 2009). It is impossible to determine on the face of the documents how quickly it reviewed a prior application submitted by Petro-Canada, as the Board's letter denying that application predates the application itself. Presumably, this is the result of a typographical error. *See* **CE-123**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada (May 5, 2009).

R&D proposals. In a terse letter only six lines long, the Board rejected the application. The only explanation provided was that "[t]he C-NLOPB views this activity to be an application of existing technology to the Terra Nova project and does not qualify under the Guidelines as a R&D activity."[353] Although the board did not elaborate any basis for this decision, it appears to have assessed the application using criteria similar to those employed by CRA in the SR&ED program. As noted, to qualify for SR&ED credit, a project must lead to a technological advance.[354]

191. Given this experience and the Board's stated intent to defer to the determinations of CRA in evaluating expenditures claimed for tax credit under the SR&ED program, it is unlikely that most R&D expenditures undertaken in the usual course of business will qualify for purposes of the Guidelines.[355] [redacted] Project operators therefore will have to fabricate additional activities simply for purposes of meeting their obligations vis-

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[353] **CE-123**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada, at EMM0002190 (May 5, 2009); *see also supra* ¶ 124. Because the date written on the Board's letter appears to be a typographical error, it is not possible to determine whether the Board met its stated goal to evaluate the application within five business days. *See id.* (Board's letter is dated May 5, 2009, while Petro-Canada's application is dated June 1, 2009).

[354] *See supra* ¶ 87.

[355] *See supra* note 160. As noted, reliance on CRA's assessment of SR&ED claims raises practical problems because CRA does not reach its decision until months or years after the fact of the expenditure. If the Board intends to offer preliminary approval subject to later review by CRA, it could create further expenditure burdens by reversing its preliminary approval. In that case, the operator will have spent money that it otherwise did not need to spend in reliance on the Board's assurance, and yet it will still fall short of meeting its expenditure target under the Guidelines. In that case, an operator may end up paying twice, first by undertaking the project and then by placing the equivalent shortfall in spending into a fund to be administered by the Board.

[356] *See supra* note 156. [redacted] *See* **CE-144**, Hibernia SR&ED Acceptance Chart.

à-vis the Board. At the same time, because the operators will need to invent new kinds of spending opportunities where they lack occasion to undertake activities in the usual course of business, it is unclear whether projects undertaken to satisfy the Board will qualify for SR&ED credit or a deduction from royalty payments associated with the projects.[357] If this proves to be the case, the net cost of individual R&D activities also will increase substantially as a result of the Guidelines.

192. Article 1106 was designed to guard against this type of uneconomic behavior. Indeed, as noted above, one of the American negotiators of the NAFTA explained that the provision was meant to ensure that "sourcing and sales decisions [would be] based on the investor's judgment, not ... the dictates of the host government.[358] By supplanting provincial development goals for the business judgment of the project operators, the R&D Expenditure Guidelines decrease the conformity of the regulatory framework in a manner that goes right to the heart of Article 1106.[359]

193. For all of these reasons, the R&D Expenditure Guidelines were not an "existing" measure at the time of the NAFTA and cannot be viewed as an amendment to any existing measure. Even assuming *arguendo* that they could be viewed as such, they decrease the conformity of the Federal Accord Act and every subordinate measure adopted or maintained thereunder with Article 1106, and therefore fail the "ratchet test" that defines the Article 1108(1)(c) exemption.

D. The Guidelines Violate Article 1105(1)'s Guarantee of Fair and Equitable Treatment

194. Article 1105(1) establishes an obligation on each Party to "accord to investments of investors of another Party

[357] Phelan Statement I, ¶¶ 29-30.

[358] **CA-62**, Price, at 729.

[359] *See* **CA-61**, Legum, at 55-56 (prohibitions on performance requirements developed in response to economic policies imposed on foreign investors that lead to substantial inefficiencies); **CA-59**, Kinnear, *Article 1106*, at 11 (Article 1106 "prevents NAFTA countries from using performance requirements to distort investment decisions in their favor.").

treatment in accordance with international law, including fair and equitable treatment and full protection and security."[360] Canada breached this obligation by failing to provide a stable regulatory framework for the conduct of petroleum development projects in the Newfoundland offshore area and by frustrating Claimants' legitimate expectations with regard to that regulatory framework.

195. Chapter 11 tribunals have devoted substantial attention to the scope and substantive content of the minimum standard of treatment guaranteed by Article 1105(1). A series of arbitral awards punctuated by a binding Interpretative Note issued jointly by the NAFTA parties establishes three salient points: *first*, the source of the minimum standard of treatment guaranteed by the treaty is customary international law on the treatment of aliens; *second*, the content of the standard is not static, but rather evolves over time with the development of customary international law; and *third*, the minimum standard of treatment afforded to foreign investors by current customary international law includes a protection of the legitimate expectations upon which the investor relied in entering into the investment.

196. As one Chapter 11 tribunal observed, "[t]here is no disagreement among the State Parties to the NAFTA ... that the requirement of fair and equitable treatment in Article 1105 is to be understood by reference to the customary international law standard of treatment of aliens."[361] Indeed, the trade ministers for the three NAFTA Parties, acting under the aegis of the Free Trade Commission ("FTC"), stated in binding Notes of Interpretation issued pursuant to Article 1131(2) that: "Article 1105(1) prescribes the customary international law minimum standard of treatment of aliens as the minimum standard of treatment to be afforded to investments of investors

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[360] **CA-3**, NAFTA, art. 1105(1).

[361] **CA-32**, *Glamis Gold, Ltd. v. United States of America*, (UNCITRAL) Award of May 16, 2009, ¶ 599; *see also* **CA-58**, Kinnear, *Article 1105*, at 42 ("[A]t least one principle can be derived from the NAFTA case law on the minimum standard of treatment: pursuant to the binding note of interpretation, the source of the minimum standard of treatment is clearly...customary international law....").

of another Party."[362] Chapter 11 tribunals adjudicating Article 1105 claims treat this interpretation as authoritative.[363]

197. Arbitral tribunals addressing Article 1105(1) claims also note the evolutionary character of the norms recognized by that provision. As one tribunal explained, "both customary international law and the minimum standard of treatment of aliens it incorporates, are constantly in a process of development."[364] Accordingly, "[t]he content of the minimum standard should not be rigidly interpreted and it should reflect evolving international customary law."[365]

198. Article 1105 on its face includes a guarantee of fair and equitable treatment and full protection and security in accordance with international law. NAFTA tribunals applying the provision have repeatedly held that "the investments of investors under NAFTA are entitled, under the customary international law which NAFTA Parties interpret Article 1105(1) to comprehend, to fair and equitable treatment and to full protection and security."[366]

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[362] **CA-8**, NAFTA Free Trade Commission, *Notes of Interpretation of Certain Chapter 11 Provisions*, § 2(1) (July 31, 2001); *see also* **CA-3**, NAFTA, art. 1131(2) ("An interpretation by the Commission of a provision of this Agreement shall be binding on a Tribunal established under this Section.").

[363] *See, e.g.*, **CA-32**, *Glamis Gold*, ¶¶ 599; **CA-33**, *International Thunderbird Gaming Corporation v. United Mexican States*, (UNICTRAL) Award of January 26, 2006, ¶ 192 (adopting position of NAFTA Free Trade Commission's Notes of Interpretations of Certain Chapter 11 Provisions).

[364] **CA-16**, *ADF*, ¶ 179

[365] **CA-33**, *Thunderbird*, ¶ 194; *see also* **CA-36**, *Mondev International Ltd. v. United States of America*, ICSID Case No. ARB(AF)/99/2, Award of October 11, 2002, ¶ 119 ("Article 1105(1) is intended to provide a real measure of protection of investments, and ... having regard to its general language and to the evolutionary character of international law, it has evolutionary potential.").

[366] **CA-36**, *Mondev*, ¶ 125; *see also* **CA-51**, *Waste Management, Inc. v. United Mexican States*, ICSID Case No. ARB(AF)/00/3, Award of April 30, 2004, ¶ 98 (noting that various cases recognize minimum standard of fair and equitable treatment under Article 1105).

199. It is well settled in international law and NAFTA practice that the content of the evolving minimum standard of treatment recognized in Article 1105 is shaped by the requirements of fair and equitable treatment included in bilateral investment treaties:

> [T]he FTC interpretations incorporate current international law, whose content is shaped by the conclusion of more than two thousand bilateral investment treaties and many treaties of friendship and commerce. Those treaties largely and concordantly provide for 'fair and equitable' treatment of, and for 'full protection and security' for, the foreign investor and his investments.[367]

200. Interpreting the fair and equitable standard of such treaties, numerous tribunals and commentators have concluded that that standard is no different from the minimum standard of treatment protected by customary international law.[368] Indeed, as the tribunal in *Biwater Gauff v. Tanzania* observed,

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[367] **CA-36**, *Mondev*, ¶ 125. Although one NAFTA tribunal recently interpreted Article 1105 to comprehend a standard of egregiousness rooted in customary international law of the 1920s, **CA-32**, *Glamis Gold*, ¶ 616, other Chapter 11 tribunals interpreting the same Article have not required such a showing, *e.g.*, **CA-51**, *Waste Management*, ¶ 93 ("Both the *Mondev* and *ADF* tribunals rejected any suggestion that the standard of treatment of a foreign investment set by NAFTA is confined to the kind of outrageous treatment referred to in the *Neer* case[.]"). In any event, even if egregiousness were required, the Board's explicit repudiation of a series of direct agreements that have guided project operations for twenty years or more certainly meets that standard.

[368] *See, e.g.*, **CA-19**, *Azurix v. Argentine Republic*, ICSID Case No. ARB/01/12, Award of July 14, 2006, ¶ 361 (considering that the difference between the two standards is not "of material significance" and concluding that "the minimum requirement to satisfy [the fair and equitable treatment] standard has evolved and the Tribunal considers that its content is substantially similar whether the terms are interpreted in their ordinary meaning, as required by the Vienna Convention, or in accordance with customary international law"); **CA-21**, *CMS Gas Transmission Company v. Argentine Republic*, ICSID Case No. ARB/01/8, Award of May 12, 2005, ¶ 284 ("the Treaty standard of fair and equitable treatment and its connection with the required stability and predictability of the business environment, founded on solemn legal and contractual commitments,

> [A]s found by a number of previous arbitral tribunals and commentators, . . . the actual content of the treaty standard of fair and equitable treatment is not materially different from the content of the minimum standard of treatment in customary international law.[369]

Having reviewed numerous decisions rendered by both NAFTA and bilateral investment treaty tribunals defining the meaning of the standard, the tribunal concluded that

> the purpose of the fair and equitable treatment standard is to provide to international investments treatment that does not affect the basic expectations that were taken into account by the foreign investor to make the investment, as long as these expectations are reasonable and legitimate and have been relied upon by the investor to make the investment.[370]

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is not different from the international law minimum standard and its evolution under customary law"); **CA-46**, *Siemens v. Argentine Republic*, ICSID Case No. ARB/02/8, Award of February 6, 2007, ¶¶ 291-299 (analyzing the development of the minimum standard of treatment as shaped by the fair and equitable treatment provisions in bilateral investment treaties); **CA-39**, *Occidental Exploration and Production Company v. The Republic of Ecuador*, LCIA Case No. UN3467, Final Award of July 1, 2004, ¶ 190 (the Treaty standard of fair and equitable treatment "can be equated with that under international law as evidenced by the opinions of the various tribunals"); *see generally* **CA-63**, J.C. Thomas, *Reflections on Article 1105 of NAFTA: History, State Practice, and the Influence of Commentators*, 17 ICSID Rev.—FILJ 21(2002).

[369] **CA-20**, *Biwater Gauff (Tanzania) Ltd. v. United Republic of Tanzania*, ICSID Case No. ARB/05/22, Award of July 24, 2008, ¶ 592.

[370] **CA-20**, *Biwater Gauff*, ¶ 602 (citations omitted); *see also* **CA-33**, *Thunderbird*, ¶ 147 ("[T]he concept of 'legitimate expectations' relates, within the context of the NAFTA framework, to a situation where a Contracting Party's conduct creates reasonable and justifiable expectations on the part of an investor (or investment) to act in reliance on said conduct, such that a failure by the NAFTA Party to honour those expectations could cause the investor (or investment) to suffer damages"); **CA-51**, *Waste Management*, ¶ 98 ("it is relevant that the treatment is in breach of representations made

This requirement "becomes particularly meaningful when the investment has been attracted and induced by means of assurances and representations."[371]

201. Indeed, determining whether the legitimate expectations of an investor have been frustrated is necessarily dependent on the facts of each case and, in particular, the terms of the original investment and the manner in which the government action has changed those terms. As one Chapter 11 tribunal found, "[t]he threshold for legitimate expectations may vary depending on the nature of the violation alleged under the NAFTA and the circumstances of the case."[372] Therefore, the standard "is to some extent a flexible one which must be adapted to the circumstances of each case."[373] The record as a whole determines whether a Party has breached an

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by the host state which were reasonably relied on by the claimant"); **CA-32**, *Glamis Gold*, ¶ 621 ("legitimate expectations relate to an examination under Article 1105(1)").

[371] **CA-45**, *Sempra Energy International v. Argentine Republic*, ICSID Case No. ARB/02/16, Award of September 28, 2007, ¶ 298; *see also* **CA-31**, *Gami Investments, Inc. v. United Mexican States*, (UNCITRAL) Award of November 15, 2004, ¶ 91 ("Much depends on context. The imposition of a new ... requirement may for example be viewed quite differently if it appears on a blank slate or if it is an arbitrary repudiation of a pre-existing ... regime upon which a foreign investor has demonstrably relied."); **CA-19**, *Azurix*, ¶ 318 (citing and endorsing the *Tecmed* reasoning, the tribunal noted that the "expectations as shown in that case are not necessarily based on a contract but on assurances explicit or implicit, or on representations, made by the State which the investor took into account in making the investment"); **CA-43**, *Saluka Investments BV (The Netherlands) v. The Czech Republic*, Partial Award of March 17, 2006, ¶ 301 ("An investor's decision to make an investment is based on an assessment of the state of the law and the totality of the business environment at the time of the investment as well as on the investor's expectation that the conduct of the host State subsequent to the investment will be fair and equitable.").

[372] **CA-33**, *Thunderbird*, ¶ 148.

[373] **CA-51**, *Waste Management*, ¶ 99.

investor's legitimate expectations within the meaning of Article 1105(1).[374]

202. Several tribunals have found violations of an investor's legitimate expectations by virtue of state action making fundamental changes to the terms of an administrative permit upon which the investment had been premised, or revoking such permit on the basis of minor performance issues without giving the investor an opportunity to remedy them.[375] Likewise, fundamental changes to a contractual relationship such as failure by the State to deliver on a contractual promise, express threats to terminate a contract or unilateral suspension of a contract have been held to violate the investor's legitimate expectations.[376]

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[374] **CA-31**, *GAMI*, ¶ 103; *see also* **CA-36**, *Mondev*, ¶ 118 ("A judgment as to what is fair and equitable cannot be reached in the abstract; it must depend on the facts of the particular case.").

[375] *See, e.g.*, **CA-49**, *Técnicas Medioambientales Tecmed, S.A. v. United Mexican States*, ICSID Case No. ARB (AF)/00/2, Award of May 29, 2003, ¶ 173; *see also* **CA-35**, *Metalclad Corporation v. Mexico*, ICSID Case No. ARB(AF)/97/1, Award of August 30, 2000, ¶ 89 ("Metalclad was entitled to rely on the representations of federal officials and to believe that it was entitled to continue its construction of the landfill. In following the advice of these officials,... Metalclad was merely acting prudently and in the full expectation that the permit would be granted.").

[376] **CA-25**, *Duke Energy Electroquil Partners & Electroquil S.A. v. Republic of Ecuador*, ICSID Case No. ARB/04/19, Award of August 18, 2008, ¶¶ 363-364 (finding that by failing to deliver on a payment guarantee, which, "[i]n light of the clear terms of the Payment Trust Agreements and of the Payment Decree," the claimant considered as "condition precedent to its investment," Ecuador "deceived" the claimant's legitimate expectations); **CA-27**, *Eureko B.V. v. Republic of Poland*, Partial Award of August 19, 2005, ¶ 232 (finding that by violating Eureko's contractual right to an initial public offering, which would have led it to acquire majority control of a Polish insurance group, Poland "consciously and overtly, breached the basic expectations of Eureko that are at the basis of its investment . . ."); **CA-22**, *Compañiá de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic*, ICSID Case No. ARB/97/3, Award of August 20, 2007, ¶ 7.4.42 (finding that, among other instances, threats to terminate a concession agreement "directly undermined Claimants' legitimate expectations of their investment"); **CA-39**, *Occidental*, ¶ 184, 187 (finding that Ecuador's interpretation

203. Other tribunals have held that the protection afforded by the fair and equitable treatment provision requires more broadly that a State maintain a stable legal and business environment for investments.[377] For example, in *Occidental Petroleum v. Ecuador*, a regulatory decision not to reimburse a value added tax sufficed to violate the standard of fair and equitable treatment, because it changed the legal environment in which the investment was made.[378] In *MTD v. Chile*, the claimant argued that Chile violated its obligation to treat investments fairly by encouraging strong expectations that the investment could be built in a particular location, entering into a contract confirming that location, and then disapproving that location as a matter of policy after MTD irrevocably

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of the contractual participation formula to permit its refusal to reimburse VAT payments by the investor was "manifestly wrong," constituted an important change to the framework under which the investment was made, and violated the fair and equitable treatment standard).

[377] **CA-26**, *Enron Corporation and Ponderosa Assets, L.P. v. Argentine Republic*, ICSID Case No. ARB/01/3, Award of May 22, 2007, ¶ 260 ("the Tribunal concludes that a key element of fair and equitable treatment is the requirement of a '*stable framework for the investment*', which has been prescribed by a number of decisions."); **CA-39**, *Occidental*, ¶ 191 ("The relevant question for international law in this discussion is . . . whether the legal and business framework meets the requirements of stability and predictability under international law. . . .[T]here is certainly an obligation not to alter the legal and business environment in which the investment has been made."); **CA-21**, *CMS*, ¶ 274 ("There can be no doubt ... that a stable legal and business environment is an essential element of fair and equitable treatment."); **CA-34**, *LG&E Energy Corp. v. Argentine Republic*, ICSID Case No. ARB/02/1, Decision on Liability of October 3, 2006, ¶¶ 125, 131 (noting that "the fair and equitable standard consists of the host State's consistent and transparent behavior, free of ambiguity that involves the obligation to grant and maintain a stable and predictable legal framework necessary to fulfill the justified expectations of the foreign investor."); **CA-25**, *Duke Energy*, ¶ 339 ("The Tribunal concurs with the findings of the tribunals in *CMS, Tecmed, Occidental v. Ecuador*, discussed by the parties, pursuant to which a stable and predictable legal and business environment is considered an essential element of the fair and equitable treatment standard.").

[378] **CA-39**, *Occidental*, ¶¶ 184, 187.

committed its investment to build the project in that location.[379] The tribunal agreed, holding that Chile "treated unfairly and inequitably the Claimants by authorizing an investment that could not take place for reasons of its urban policy."[380] It also observed that the State "has an obligation to act coherently and apply its policies consistently, independently of how diligent an investor is."[381]

204. The imposition of the R&D Expenditure Guidelines and the Board's actions to enforce compliance with their terms similarly change the economic basis on which Claimants invested and depart from the regulatory framework that had governed the conduct of the Hibernia and Terra Nova projects since their inception. Indeed, as HMDC noted in objecting to the Guidelines, "[a]ny attempts to impose further obligations on the Hibernia owners which exceed those embodied in the approved Benefits Plan is in excess of the C-NOPB's jurisdiction and amounts to a unilateral change in the agreed fiscal regime upon which the Hibernia project was founded."[382] The Guidelines therefore undermined the legitimate expectations of the interest owners as to the scope of their R&D obligations when they decided to proceed with their investments.

205. When the Claimants invested in the Hibernia and Terra Nova projects, they did so based on a series of assurances from the Board and the federal and provincial governments that the commitments articulated in their Benefits

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[379] **CA-38**, *MTD Equity Sdn. Bhd. & MTD Chile S.A. v. Chile*, ICSID Case No. ARB/01/7, Award of May 25, 2004, ¶¶ 188-189.

[380] *Id.* ¶ 188.

[381] *Id.* ¶ 165. NAFTA Chapter 11 tribunals have found measures such as a disruptive and costly questionnaire verification review process and a ban on the export of toxic waste to constitute a breach of Article 1105. **CA-42**, *Pope and Talbot Inc. v. Government of Canada*, Award on the Merits of Phase 2 of April 10, 2001, ¶ 181 (questionnaire); **CA-44**, *S.D. Myers*, ¶¶ 161-195 (export ban).

[382] **CE-43**, Letter from J. Taylor, HMDC to F. Way, CNLOPB, at EMM0000477 (Nov. 16, 2004); *see also* **CE-132**, Meeting Minutes, CNLOPB/Industry Representatives, at EMM0002237 (October 28, 2003) ("the guidelines result in increased costs, which ... affects the stability of the fiscal regime").

Plans with respect to R&D were satisfactory to meet the requirements of the Accord Acts and would define the scope of their obligations. As noted, the Accord Acts simply condition the right to develop oil fields in the offshore area on the Board's approval of a benefits plan containing provisions for expenditures on R&D in the Province.[383]

206. The Hibernia and Terra Nova Benefits Plans and the Board's decisions approving these Plans also did not impose such requirements, though the Plans were carefully negotiated documents. The Board held consultations with both project proponents after submission of their Benefits Plans in order to clarify or refine various elements. In the case of Hibernia, the Board required the project proponent to submit a Supplementary Benefits Plan elaborating additional commitments.[384] The Board also requested an articulation by the project participants of the benefits-related principles and practices that would guide their work on the Hibernia project. In response, the proponents made clear — as they also did in the Benefits Plan and the Supplementary Benefits Plan — that they intended to support R&D "to solve problems unique to the Canadian offshore environment."[385] At no point was there any suggestion that the project owners would undertake a prescribed level of R&D, much less an arbitrary level of R&D calibrated to match the average expenditures of an undifferentiated sample set of oil and gas companies operating both onshore and off.[386]

207. The Board also imposed conditions to its approval of both Benefits Plans.[387] As noted, however, the Board never imposed any requirement or demanded any supplementary

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[383] **CA-11**, *Federal Accord Act*, s. 45(2); **CA-12**, *Provincial Accord Act*, s. 45(2); *see supra* ¶¶ 40-52, 57-81. As noted, once a benefits plan is approved by the Board, the Acts themselves do not contain any ongoing obligation with respect to R&D. They do not impose a targeted R&D expenditure level, nor do they require pre-approval of individual R&D expenditures.

[384] *See supra* ¶¶ 57, 78.

[385] *See supra* ¶¶ 61, 63, 66.

[386] *See supra* ¶ 113.

[387] *See supra* ¶¶ 65, 79.

assurance from the proponents with respect to R&D expenditures.[388] The Board's actions in approving the Benefits Plans, and the federal and provincial governments' actions in approving the Board's decisions, engendered a legitimate expectation on the part of the project proponents that the provisions made in the Benefits Plans with respect to R&D satisfied the requirements of the Accord Acts and would not be supplemented by the Board.

208. By the time the Hibernia interest owners made the decision to proceed with the project, they did so on the basis of further assurances by the federal and provincial governments that they would not be subject to further R&D-related requirements. As noted, progress on the project had stalled after approval of the Benefits Plan due to a significant drop in the price of oil that disturbed the project economics. Faced with a very real possibility that the interest owners would decide to abandon the project altogether, the two governments stepped in by way of the 1990 Framework Agreement and related binding agreements to provide financial and regulatory guarantees needed to induce the project participants to proceed with the investment. In exchange for their contributions, the governments demanded from the project participants certain additional benefits-related commitments, but they sought no further pledge concerning R&D.[389] This further contributed to the investors' legitimate expectation that the federal and provincial governments harbored no intention to impose any R&D-related requirements beyond those established in the Benefits Plan and the Board's Decision 86.01 approving the Plan.

209. The Board's history of action (and inaction) with regard to benefits-related guidelines also formed a basis for legitimate expectations that no further R&D requirement would be imposed after a project's benefits plan had been approved. As noted, prior to its issuance of the 2004 R&D Expenditure Guidelines, the only other guidelines issued by the Board applied exclusively to the exploration phase of projects; they addressed reporting requirements during that phase and provided guidance to project proponents for the preparation of

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[388] *Id.*

[389] *See supra* ¶¶ 69-71.

benefits plans.[390] They did not purport to contain any continuing requirements applicable after approval of a benefits plan.[391] Thus, even if the Board had carried through on its intention noted in the 1986 version to promulgate guidance with respect to R&D expenditure levels,[392] that guidance would have applied only to inform the Board's consideration of benefits plans submitted after the promulgation of such guidance. When the Board approved the Hibernia Benefits Plan in 1986, it had not taken any action to issue the contemplated expenditure guidance. Long before the Board approved the Terra Nova Benefits Plan in 1997, it issued revised guidelines that abandoned the idea of expenditure guidance altogether. This history and the fact that the Board never showed any inclination prior to the approval of either project to promulgate guidelines applicable to the development or production phases further supported a legitimate expectation on the part of the investors that the Board would not seek to impose obligations beyond those established in the approved Benefits Plans.

210. The Board further engendered this legitimate expectation when it approved amendments to the Hibernia Development Plan without requiring modifications to the Benefits Plans or otherwise imposing conditions related to R&D. The August 1990 amendment to the Hibernia Development is relevant to the legitimate expectations of the Hibernia investors, because it occurred before the investors committed to proceed with the project in the November 1990 Framework Agreement. The 1990 amendment and the 1997 amendment to the Hibernia Development Plan are also relevant to the investors' expectations with regard to the Terra Nova project, which launched after both amendments had been

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[390] *See supra* ¶¶ 46-52.

[391] As described above, the Board issued letters in the first few years after approval of the Hibernia Benefits Plan confirming that annual benefits reports submitted by HMDC met the requirements of the Exploration Phase Guidelines. *See supra* ¶ 90. It makes sense that the Board would continue to evaluate the benefits reporting by reference to the Exploration Phase Guidelines in those years because the project had not yet moved into the development phase, at which point the approved Benefits Plan begins to govern. *See supra* ¶ 52.

[392] *See supra* ¶ 49.

approved. Because amendments to development plans are considered fundamental decisions that must be approved by the federal and provincial governments, the project participants were entitled to rely on their approvals as further assurance that the R&D plans articulated in the Benefits Plans were sufficient to comply with Accord Acts and, moreover, met the governments' objectives for the projects as well as the Board's.

211. When the Hibernia project participants made the decision to proceed with the investment in 1990, they did so on the basis of a series of express promises by the federal and provincial governments, and indeed by the Board, as to the scope of their benefits commitments. By the time the Terra Nova project arose, the Claimants had over a decade of experience watching the Board administer the Accord Acts with the support of the federal and provincial governments at Hibernia. It was reasonable for the Claimants to rely on that experience as a guide. In addition, by the time the Benefits Plan for Terra Nova was submitted and approved, the project participants had Canada's express assurance in the NAFTA that it would not enact more restrictive requirements with regard to R&D.

212. This extensive history of State conduct by the federal and provincial governments and the Board created legitimate expectations on the part of the Hibernia and Terra Nova project participants with respect to the extent of the R&D-related regulatory requirements that would govern conduct of the projects. The 2004 R&D Expenditure Guidelines represent a fundamental shift in that regulatory framework and in the contractual understanding expressed in the Benefits Plans and the Hibernia Framework Agreement. The Guidelines therefore undermine the legitimate expectations engendered by the State and relied upon by the project participants when they decided to proceed with the investments. This State conduct amounts to a violation of the minimum standard of treatment guaranteed to investors by customary international law and, in turn, by NAFTA Article 1105(1).

V.

CLAIMANTS ARE ENTITLED TO DAMAGES THAT ELIMINATE ALL THE CONSEQUENCES OF CANADA'S BREACHES

213. Canada has thus breached its NAFTA obligations through the promulgation and enforcement of the R&D Expenditure Guidelines. Claimants are entitled under international law to be made whole for the harm inflicted upon them by this wrongful conduct.

214. Under Article 1135 of the NAFTA, a Tribunal that makes a final award against a Party may award, separately or in combination, only (a) monetary damages and any applicable interest or (b) restitution of property.[393] In this case, because the harm inflicted by the Guidelines is pecuniary in nature, the appropriate remedy is monetary damages.

215. The NAFTA does not prescribe how monetary damages are to be calculated. Therefore, the Tribunal should calculate Claimants' damages from Canada's breaches in accordance with general principles of international law. The Permanent Court of International Justice formulated the relevant customary international law standard eighty years ago in its judgment in the *Chorzów Factory* case:

> The essential principle contained in the actual notion of an illegal act – a principle which seems to be established by international practice and in particular by the decisions of arbitral tribunals – is that reparation must, so far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed.[394]

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[393] Article 1135 further provides that the Tribunal may award costs in accordance with the applicable arbitration rules. Article 58 of the ICSID Arbitration (Additional Facility) Rules, which govern this proceeding, authorize the Tribunal to award costs. Accordingly, Claimants have requested an award of costs. *See infra* ¶ 223.

[394] **CA-28**, *Factory at Chorzów*, 1928 P.C.I.J. (Ser. A) No. 17, Decision of September 13, 1928, at 47.

Today, the *Chorzów Factory* standard enjoys universal recognition.[395]

216. In order to make Claimants whole, the Tribunal should award their cost of compliance with the Guidelines. As shown above, prior to the Guidelines, the Hibernia and Terra Nova Benefits Plans and the Hibernia Framework Agreement defined the scope of Claimants' obligations with respect to benefits, including R&D. None of those measures established any obligation to meet a fixed R&D spending level or to make R&D expenditures outside the normal course of project operations. Under the Guidelines, however, the Hibernia and Terra Nova projects, in which Claimants are investors, will be required throughout their remaining lifetime to make R&D expenditures in the Province in excess of their actual business needs. Claimants' damages are thus the difference between the amount of R&D that will be necessary to comply with the Guidelines and the amount that Claimants otherwise would have spent on R&D in the usual course of project operations.

217. Claimants have calculated these damages using their actual operational history since the Guidelines became effective in 2004, projections that were developed in the ordinary course of business, and assumptions and forecasts that they will show to be reasonable and conservative. Each of the inputs is addressed in turn below.

218. The damages model developed by Claimants' expert, Howard Rosen, is relatively straightforward. It is based on the formula set forth in the Guidelines for calculating R&D expenditure requirements. Mr. Rosen analyzed the expected expenditure requirement from the effective date of the Guidelines through the remaining lifetime of the projects and deducted from that amount the level of R&D expenditures that

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395 *See, e.g.*, **CA-15**, *ADC Affiliate Ltd. v. Republic of Hungary*, Award of September 27, 2006, ¶ 493 (reviewing numerous decisions and concluding that "there can be no doubt about the present vitality of the *Chorzów Factory* principle, its full current vigor having been repeatedly attested to by the International Court of Justice."); **CA-44**, *S.D. Myers*, ¶ 311; **CA-22**, *Compañía de Aguas*, ¶ 8.2.4-8.2.5; **CA-46**, *Siemens*, ¶ 351; **CA-21**, *CMS*, ¶ 400; **CA-17**, *AMOCO International Finance Corporation v. Iran*, Award of July 14, 1987, ¶ 191; **CA-48**, *Starrett Housing Corp. v. Iran, Case No. 24*, Award of August 14, 1987, ¶ 264.

Claimants would otherwise make in the usual course of business if the Guidelines were not in force. For incremental expenditure requirements incurred from 2010 onward, he applied a discount factor to arrive at a present value. The inputs into the calculation are as follows:

- *Production Volume* — Production volumes for the years 2004 through 2008 are actual. The Board agrees with these numbers.[396] Annual production in the future is based on the Hibernia and Terra Nova production profiles developed in the ordinary course of business by the project operators. The most recent Hibernia profile was submitted to the Board in June 2009 in connection with a pending application for an amendment to the Hibernia Development Plan. A profile for Terra Nova was last submitted to the Board in 2005 in connection with an application for an amendment to the project Development Plan, which the Board approved. However, ExxonMobil Canada annually updates the Terra Nova profile based on inputs from the project operator for its own business planning purposes. For both Hibernia and Terra Nova, Mr. Rosen used the most recent forecasts available, as they represent the best current estimate of production through the remaining life of the projects.[397]

- *Oil Price* — Pricing data for the years 2004 through 2008 are actual. The Board agrees with these numbers.[398]

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[396] **CE-116**, Letter from F. Smyth, CNLOPB, to P. Sacuta, HMDC (Feb. 26, 2009); **CE-117**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada (Mar. 3, 2009).

[397] Phelan Statement I, ¶ 34.

[398] *See id.* It appears that the Board's letter to HMDC misstated the price per barrel for 2006. Although the Board purports to apply the same price benchmark (Brent minus 10%) for both projects, it reported inconsistent prices for 2006. In its letter to HMDC, the Board reported the price per barrel at $66.18. In its letter to Petro-Canada, the Board reported the price per barrel at $66.23. It appears, however, that the Board in fact used the $66.23 per barrel price to calculate HMDC's R&D expenditure requirement for that year. Claimants therefore assume that the $66.18 figure that appears in the Board's letter to HMDC is merely a typographical error. Accordingly, Claimants instructed their expert to use the $66.23 per barrel price in the damages model. If Claimants have misunderstood

Pricing assumptions for the future were developed by Sarah Emerson of Energy Security Analysis, Inc. ("ESAI"), an expert economist who specializes in oil market analysis and price forecasting. ESAI's forecast prepared for use in the damages model is no different from its forecasts for corporate clients in the ordinary course of business. As Ms. Emerson's report indicates, the ESAI forecast projects lower oil prices than the forecast issued by the U.S. Department of Energy. Because the Guidelines require a percentage of total revenues to be spent on R&D, higher oil prices lead to higher required R&D spending. Therefore, the lower ESAI forecast leads to a more conservative measure of damages.

- *Statistics Canada Benchmark Factor* — The Statistics Canada benchmark factor for 2004 through 2008 is the actual benchmark calculated by the Board for each of those five years.[399] On a going-forward basis, the damages model assumes that the benchmark factor will be an average of the benchmark factor applied in each of those five years: 0.39 percent. This estimate is conservative for a number of reasons. First, it is reasonable to expect that the level of R&D required to locate and access as-yet unexploited reserves in new projects across Canada, which will be included in future Statistics Canada surveys, will rise over time, because companies inevitably develop the most accessible oil fields first and save the more technologically challenging projects for later. Second, R&D expenditures in the Province, and therefore in the Statistics Canada survey, will increase as a result of the Guidelines requirement.[400]

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the price discrepancy, we expect that Canada will offer an explanation in its opening submission.

[399] **CE-116**, Letter from F. Smyth, CNLOPB, to P. Sacuta, HMDC (Feb. 26, 2009); **CE-117**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada (March 3, 2009).

[400] As noted, even a minor variance in the benchmark can have a major impact on the R&D expenditure requirement for a project with production volumes as significant as Hibernia. *See supra* note 229.

- *Development Phase Credit* — Under the Guidelines, the development phase credit is 0.5% of the total capital cost of the project.[401] It is apportioned over the production phase in relation to the production volume each year. Because the Guidelines went into effect after the Hibernia and Terra Nova projects were already into their production phases, the Board has indicated an intent to pro rate the total development phase credit, allowing the operators to deduct from their production phase expenditure requirements only that amount allocated to the period beginning with the April 1, 2004 effective date of the Guidelines and continuing through the remaining lifetime of the projects.[402] The development phase credit included in the damages model for 2004 through 2008 is the actual amount calculated by the Board for each of those five years.[403] For the remaining life of the Hibernia project, the balance of the development phase credit is allocated based on anticipated production volume over time. For Terra Nova, the full balance of the development phase credit is deducted from the total amount owed through 2009, because the Board has indicated that it will allow the operator to apply the entire development phase credit upfront.[404]

- *R&D Expenditures in the Course of Business* — R&D expenditure levels for 2004 though 2008 are based on SR&ED data. [redacted][405] The R&D expenditure amounts supplied for 2004 therefore correspond to the full amount of SR&ED credits claimed that year. In 2005 and 2006, CRA audited Claimants'

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[401] **CE-1**, 2004 R&D Guidelines, § 2.2.1; *see supra* note 204.

[402] *See* Phelan Statement I, ¶ 23.

[403] **CE-116**, Letter from F. Smyth, CNLOPB, to P. Sacuta, HMDC, (Feb. 26, 2009); **CE-117**, Letter from F. Smyth, CNLOPB, to G. Vokey, Petro-Canada, (Mar. 3, 2009).

[404] *See* Phelan Statement I, ¶ 23.

[405] **CE-144** Hibernia SR&ED Acceptance Chart; **CE-146** Murphy Terra Nova SR&ED Claims Summary.

SR&ED applications related to Hibernia and [redacted] the expenditure amounts supplied for the use in the damages model for Hibernia correspond to the amount of SR&ED credits actually allowed by CRA.[406] For Terra Nova, the damages model reflects the full amount of SR&ED claimed in 2005 and 2006, [redacted][407] Because CRA has not yet reviewed the SR&ED credit applications that Claimants submitted for 2007 and 2008, the R&D expenditure data supplied for those years corresponds to the full value of Claimants' SR&ED claims. Those inputs will need to be adjusted if CRA denies SR&ED credit and if the Board in turn denies credit toward the Guidelines expenditure requirement.[408] To estimate Claimants' R&D expenditures on a going-forward basis, Mr. Rosen applied a normalized average of the inputs supplied for 2004 through 2008.[409] This use of a normalized average is appropriate because the Hibernia and Terra Nova projects are midway through their production cycles and are

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[406] As noted, the Board has indicated an intent to apply the definition of SR&ED in evaluating R&D expenditures under the Guidelines. Petro-Canada's experience to date seeking pre-approval of individual expenditures from the Board supports this understanding. To the extent that the Board deviates from this approach, Claimants expect it to be more – not less – restrictive in what it allows. Phelan Statement I, ¶ 20; Hutchings Statement I, ¶ 25; *see also supra* note 160.

[407] **CE-146** Murphy Terra Nova SR&ED Claims Summary.

[408] **CE-144** Hibernia SR&ED Acceptance Chart; **CE-146** Murphy Terra Nova SR&ED Claims Summary. Similarly, the 2004 through 2006 inputs will need to be adjusted if the Board departs from CRA's treatment and denies credit under the Guidelines for any expenditures qualified as SR&ED. *See supra* note 160.

[409] The normalized average represents the full value of R&D expenditures undertaken from 2004 through 2008 minus the MM Well, since the MM Well was an extraordinary expense and HMDC does not anticipate a business need to undertake any further R&D expenses of that magnitude. *See* Graham Statement I, ¶¶ 15, 18; Phelan Statement I, ¶ 26.

expected to have consistent R&D needs relative to anticipated production levels each year.[410]

- *E&T Expenditures in the Course of Business* — E&T expenditure levels for 2004 through 2008 are based on actual spend during that period. To estimate Claimants' E&T expenditures on a going forward basis, the expert applied a normalized average of the inputs supplied for 2004 through 2008. The use of a normalized average for E&T spending makes sense for the same reason it does for R&D spending.[411]

219. As shown in the schedules to Mr. Rosen's report, the Hibernia project will have to spend $121.72 million more on R&D throughout the remaining lifetime of the project than it otherwise would have. The Terra Nova project will have to spend $67.33 million more because of the Guidelines. After the net present value of these amounts is calculated, Mobil Investments Canada Inc.'s share of these additional required payments – its damages – equals $50.48 million. Murphy Oil Corporation's damages amount to $14.93 million.[412]

220. While these damages are calculated through the remaining lives of the projects (to 2036 for Hibernia, to 2018 for Terra Nova), the vast majority of these damages have already occurred or will occur in the near future. Although it remains to be seen what expenditures from the 2004 to 2008 period the Board will credit toward the Guidelines expenditure requirement, there is little uncertainty as to the inputs for that period because price, production volume and the Statistics Canada benchmark factor are all already known. Because of the impact of the net present value calculation, later years have little impact. Indeed, about 60% of Claimants total damages relate to expenditure obligations incurred through 2010, and by 2015 more than 80% of Claimants' damages will have been realized.[413]

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[410] Phelan Statement I, ¶ 26.

[411] *Id.*

[412] *See* Rosen Report, Schedule 1.

[413] *See id.*

221. Claimants have not deducted from their damages calculations potential tax savings or royalty benefits that may or may not arise from the increased R&D spending. There appear to be four different scenarios by which the project owners could engage in additional R&D spending to comply with the Guidelines. *First*, they could undertake a higher level of project-specific R&D. *Second*, they could participate in industry-wide R&D efforts that are not project-specific. *Third*, they could undertake R&D at the individual owner level that is not project-specific. *Fourth*, they could deposit any shortfall in spending into an R&D fund to be administered by the Board in accordance with the Guidelines.[414] In practice, some of these approaches may be less feasible than others due, for example, to a lack of viable spending opportunities and a lack of capacity on the part of the local R&D industry to absorb the level of spending contemplated by the Guidelines. It therefore remains to be seen how the Hibernia and Terra Nova interest owners will manage their Guidelines expenditure obligations.

222. Some of these approaches may lead to SR&ED credits or to reductions in royalty amounts; others will not. It is therefore not appropriate at this time to calculate any such potential benefits that could reduce Claimants' damages. Claimants will update the analysis in their subsequent submission and before the merits hearing if it becomes clearer how the Board plans to administer the Guidelines and what tax and royalty treatment the federal and provincial governments will accord to efforts made under any of the four approaches. However, to the extent that any uncertainty remains, that uncertainty is the fault of Canada, not Claimants, and Canada therefore must not be allowed to benefit from it.[415]

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[414] Phelan Statement I, ¶ 29.

[415] A State cannot be allowed to take advantage of its own wrong ("*nullus commodum capere de sua injuria propia*"). **CA-55**, Bin Cheng, *General Principles of Law As Applied By International Courts and Tribunals*, at 149 (1987) ("A State may not invoke its own illegal act to diminish its own liability"); **CA-50**, *Tippetts, Abbett, McCarthy, Stratton v. TAMS-AFFA*, Award of June 22, 1984, 227-228; **CA-28**, *Chorzów*, at 47; **CA-37**, *Montijo Agreement Between the United States and Colomiba*, August 17, 1874, at 1437; **CA-30**, *Frances Irene Roberts v. Venezuela*, Award of 1903, at 144; **CA-40**, *Owners of the Tattler v. Great Britain*, Award of December 18, 1920, at 50.

VI.

RELIEF REQUESTED

223. For the foregoing reasons, the Claimants respectfully submit that the Tribunal should:

(a) Find that the promulgation and enforcement of the 2004 R&D Expenditure Guidelines constitute a performance requirement within the meaning of Article 1106(1) of the NAFTA, and that Canada has breached its obligations under the Article as a result;

(b) Find that the 2004 R&D Expenditure Guidelines are not covered by Article 1108(1) of the NAFTA or Canada's Annex I reservation to the treaty for the Federal Accord Act;

(c) Find that Canada has breached its obligations under Article 1105(1) of the NAFTA by failing to provide Claimants and their investments the guarantee of fair and equitable treatment in accordance with international law;

(d) Find that the Board's assessment of R&D expenditure requirements under the 2004 R&D Expenditure Guidelines from the effective date of April 1, 2004 through December 31, 2008 has directly caused Claimants to suffer damages;

(e) Find that the Board's future assessment of R&D expenditure requirements under the 2004 R&D Expenditure Guidelines similarly will directly cause Claimants to suffer damages;

(f) Order Canada to pay to Claimant Mobil Investments Canada Inc., or alternatively, to its indirectly controlled enterprises, money damages in an amount to be established at the hearing, but no less than CDN $50.48 million, plus interest as applicable when the Tribunal issues its final award, to compensate Claimant Mobil Investments Canada for the cost of its compliance with the Guidelines through the remaining life of the Hibernia and Terra Nova projects, in which it is an investor;

(g) Order Canada to pay to Claimant Murphy Oil Corporation, or alternatively, to its directly or indirectly controlled enterprises, money damages in an amount to be established at the hearing, but no less than CDN $14.93 million, plus interest as applicable when the Tribunal issues its final award, to compensate Claimant Murphy Oil Corporation for the cost of its compliance with the Guidelines through the remaining life of the Hibernia and Terra Nova projects, in which it is an investor;

(h) Order Canada to pay to Claimants the full measure of legal fees and costs, to be determined at the conclusion of the proceedings, that they will have incurred as a result of this arbitration; and

(g) Order such further relief as it deems appropriate.

Respectfully submitted,

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