#### IN THE ARBITRATION UNDER CHAPTER ELEVEN OF THE NAFTA AND THE ICSID CONVENTION

### **BETWEEN:**

#### MOBIL INVESTMENTS CANADA INC.

Claimant

#### AND

# GOVERNMENT OF CANADA

Respondent

ICSID Case No. ARB/15/6

# APPENDICES TO CLAIMANT'S REPLY MEMORIAL

#### ARBITRAL TRIBUNAL:

Sir Christopher Greenwood QC Mr. J. William Rowley QC Dr. Gavan Griffith QC

September 23, 2016

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# I.

# **APPENDIX A**

For each incremental expenditure claimed by Mobil Investments Canada Inc. ("Mobil") in this proceeding, this Appendix provides relevant excerpts from:

- The witness statements submitted with Claimant's Memorial of March 11, 2016 (subsection A),
- Appendix A to Respondent's Counter Memorial of June 30, 2016 (subsection B), and
- Mobil's responses thereto, including further testimony by the fact witnesses (**subsection C**).

Mobil's general positions on Canada's arguments are also contained in the Reply Memorial at V.C, entitled "Canada's attempts to chip away at Mobil's losses are unavailing."

The testimony of the fact witnesses is indicated in blue text while excerpts of Canada's Appendix A to the Counter Memorial are indicated in red text.

The original reference numbers to the footnotes in the witness statements and Canada's Appendix A have been renumbered sequentially according to the order of their appearance in this document.

# 1. Alternative Subsea Protection Systems for Ice Scour Regions (

## A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 44-45

The conventional approach for reducing the risk of ice scour disruption in developments offshore Newfoundland and Labrador, such as Hibernia, is to place equipment at a sufficient depth below the surrounding ocean floor. The goal of this project is to study alternative concepts to help protect subsea assets—including wellheads, pipelines, and valves, installed in regions prone to ice scouring—from soil disruptions caused by ice gouging.<sup>1</sup> In 2014, HMDC contributed **one** to fund Phase 1 of this project.<sup>2</sup>

I understand that Hibernia's systems to protect its subsea equipment from ice scour have proved satisfactory for over two decades without the need for additional research. If not for the Guidelines, HMDC would not have paid for a study into unproven alternatives.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to R&D that was conducted to study alternative concepts to help protect subsea assets.<sup>3</sup> The Claimant alleges that this expenditure is compensable because the Hibernia project already has a system that protects its subsea equipment from ice scour.<sup>4</sup> The documents, however, show that

<sup>&</sup>lt;sup>1</sup>**C-246**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (March 10, 2014), *attaching* Alternative Subsea Protection Strategies for Ice Scour Regions – Phase I R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>2</sup> C-192, Hibernia 2014 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>3</sup> **CW-3**, Sampath Statement I ¶ 44.

<sup>&</sup>lt;sup>4</sup> **CW-3**, Sampath Statement I  $\P$  45.

Claimant because it

<sup>5</sup> Phase 1 of this project is highly beneficial to the

. Canadian taxpayers should not be required to compensate the Claimant for the full extent of this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasures...to minimize oil spills from ALPs and subsea components due to iceberg impact."<sup>7</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

In relation to a similar incremental R&D expenditure, the Mobil I Majority recognized that "the serious nature of pipeline damage" shows that this type of research "would have been undertaken earlier were it important."<sup>8</sup> The Mobil I Majority further found significant the fact that the Hibernia and Terra Nova projects "already have systems to address pipeline damage."<sup>9</sup>

These considerations align with Mr. Sampath's observation in his first witness statement that "Hibernia's systems to protect its subsea equipment from ice scour have proved satisfactory for over two decades without the need for additional research."<sup>10</sup> His additional comments on this expenditure, copied below, further

<sup>8</sup> **C-2**, Mobil I Award ¶ 115.

<sup>9</sup> Id.

<sup>10</sup> CW-3, Sampath Statement I ¶ 45.

<sup>&</sup>lt;sup>5</sup> **R-96**, Letter from **1999**, PRNL to Rod Hutchings, HMDC with attachments (Feb. 27, 2015), Attachment B, p. 22 (p. MICI 0004889).

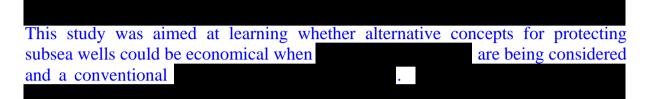
<sup>&</sup>lt;sup>6</sup> **R-97**, Alternate Subsea Protection Strategies for Ice Scour Regions – Phase 1 Report (Dec. 3, 2014), pp. 7-11, 18 (pp. MICI 0005166-5170, MICI 0005177).

 $<sup>^{7}</sup>$  C-37, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See ibid, p. 95.

reinforce his conclusion the Alternative Subsea Protection Systems for Ice Scour Regions study would not have been funded in the ordinary course of business.

## CW-10, Sampath Statement II ¶¶ 66-67

This project to study alternative concepts to help protect subsea assets were not needed for the Hibernia project and therefore would not have been funded by HMDC in the ordinary course of business.<sup>11</sup>



I take exception to Canada's suggestion that the concepts studied through this project were "cost-effective."<sup>12</sup> None of the concepts under study were shown to be cost-effective. **Concepts** highlighted for further study were likewise unproven technologies that, to my knowledge, have not been implemented anywhere. Moreover, I note that even if this research were wanted or necessary, Mobil would not have funded a joint project with its competitors where, as here, the results of this study would be made available to all of the Hibernia owners on an equal basis.<sup>13</sup>

• See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>&</sup>lt;sup>11</sup> **CW-3**, Sampath Statement I ¶ 45. See also paragraphs 22 through 26, above.

<sup>&</sup>lt;sup>12</sup> Counter Memorial Appendix A, at A-1.

<sup>&</sup>lt;sup>13</sup> See paragraphs 27 through 31, above.

)

# 2. Arctic Offshore and Pipeline Engineering Course (

## A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 127-129

In 2012, CARD obtained from HMDC and Suncor to design and to deliver a week-long course on arctic offshore and pipeline engineering.<sup>14</sup> In 2014, CARD wanted to redesign the course based on feedback and suggested improvements it had received.<sup>15</sup> To cover the cost of developing and delivering the redesigned course, <u>CARD</u> again sought and obtained funding from HMDC, this time in the amount of <sup>16</sup> I understand there are plans

HMDC would not have funded the design, redesign, or delivery of the CARD course in the ordinary course of business. Companies have more efficient and targeted ways of training their employees. For instance, large oil and gas companies like ExxonMobil regularly design and deliver in-house courses to educate their employees on new technologies and methods. I have attended and lectured at many in-house courses at ExxonMobil over the years. Unlike general interest courses, like the one delivered by CARD, in-house courses tend to be focused on immediate challenges faced by the company and the skills required to meet them.

Moreover, by 2012, the engineering required for the Hibernia and Terra Nova projects had long been completed. The parts of the course concerning the engineering of floating and fixed platform structures could only be applied by the attendees, if ever, to new projects and were entirely irrelevant to support Hibernia and Terra Nova.

• See also CW-3, Sampath Statement I ¶ 117-119 (explaining that the

<sup>&</sup>lt;sup>14</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B; **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix B; **C-292**, Letter from **CNLOPB** (September 25, 2012), *attaching* Arctic Offshore and Pipeline Engineering Course R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>15</sup> **C-293**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (March 3, 2014), *attaching* Scope Enhancement to the CARD Arctic Offshore and Pipeline Engineering Course R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>16</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix B.

recipient institution, CARD, was created to enable the Hibernia and Terra Nova projects to make sufficient Guidelines-eligible expenditures, meaning that "[b]ut for the Guidelines, the HMDC and Suncor would not have funded CARD or any of its research projects")

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to the development of a professional development course aimed at engineers assigned to work on Arctic projects. The Claimant alleges that this expenditure is compensable because companies have more targeted ways of training their employees, and that the attendees could only apply the knowledge acquired from this course to new projects and not Terra Nova or Hibernia.<sup>17</sup> The documents state, however, that the incentive for this expenditure is that it will "[f]acilitate knowledge transfer from the more experienced generation of Arctic engineers to the newer generation".<sup>18</sup> Further, the documents confirm that

<sup>19</sup> Thus, this supports training for future projects in the Arctic, which as the Claimant has noted on several occasions, is the 'new frontier' in offshore petroleum exploration.<sup>20</sup> Canadian taxpayers should not be required to pay for the full extent of this value-added R&D. The Claimant has a long-standing commitment in the Terra Nova Benefits Plan to "support education and training generally in the Province, beyond simply using local organizations and facilities to deliver the training needs of the [Terra Nova] Development".<sup>21</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

<sup>19</sup> Ibid.

<sup>20</sup> **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003215.

<sup>21</sup> C-41, Terra Nova Decision 97.01, p. 23

<sup>&</sup>lt;sup>17</sup> **CW-3**, Sampath Statement I ¶¶ 128-129

<sup>&</sup>lt;sup>18</sup> **R-98**, EMC R&D Screening Committee Presentation (Sep. 28, 2012), slide 8 (p. MICI 0004702).

# C. Mobil's Response And Further Witness Testimony

The Mobil I Majority found that CARD, the recipient institution of the expenditures for the Arctic Offshore and Pipeline Engineering Course, "entails incremental expenditure."<sup>22</sup> It further observed:

CARD functions as an autonomous research facility, which, as the Claimants point out, is accessible to all and can be used by their competitors. The Majority finds particularly convincing the Claimants' observation that this type of sharing arrangement is not representative of the manner in which Projects normally carry out "ordinary course" R&D spending. The finding that this expenditure is incremental is also supported by the timing of its inception (which was in 2010), which is clearly in line with the time period when the Claimants began to comply with the Guidelines in earnest.<sup>23</sup>

Given that CARD itself would not have been founded but for the Guidelines, the expenditures for CARD's Arctic Offshore and Pipeline Engineering Course would likewise have not been incurred in the ordinary course of business. Mr. Sampath's further observations in his second witness statement, copied below, reinforce this conclusion.

#### CW-10, Sampath Statement II ¶¶ 136-137

Canada contends that "ExxonMobil was already incurring 'training expenditures in US' and is only redirecting these expenditures to Newfoundland."<sup>24</sup> I disagree with Canada's characterization of the relationship between this training course and the in-house courses that ExxonMobil affiliates offer to their employees. This training course offered through CARD is relatively generic in comparison to the ones delivered by ExxonMobil affiliates. Moreover, unlike CARD's course, ExxonMobil affiliates do not make its courses available to their oil industry competitors.

<sup>23</sup> *Id.* ¶ 120.

<sup>&</sup>lt;sup>22</sup> **C-2**, Mobil I Award ¶ 119.

<sup>&</sup>lt;sup>24</sup> *Id.* at A-2 (citing **R-98**, EMC R&D Screening Committee Presentation (Sep. 28, 2012), slide 8 (p. MICI 0004702)).

Moreover, the fact that this training course on arctic offshore and pipeline engineering has no relevance to Hibernia or Terra Nova projects, which are already operating and are not located in the Arctic, demonstrates that it would not ordinarily have been funded by those projects, as I explain at paragraphs 22 through 26 of this statement.<sup>25</sup>

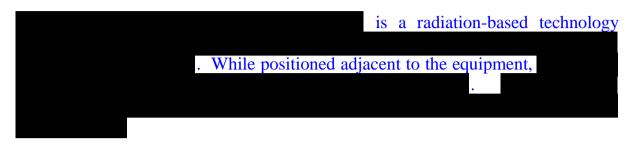
• See also CW-10, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

<sup>&</sup>lt;sup>25</sup> See also **CW-3**, Sampath Statement I ¶ 129.

# 3.

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶¶ 48-50



In theory, **but** could allow for inspection of offshore structures and systems so as to detect issues requiring remediation or repair. However, for this application, is not a proven technology. Moreover, other proven inspection methods that are now used in the field, including visual inspection, are generally considered effective and satisfactory.

Nevertheless, in 2014, HMDC paid **to to execute** a multiphase project for development and testing the **technology**.<sup>26</sup> Without the Guidelines, HMDC would not have provided funding to a contractor to attempt to develop an unproven and unnecessary technology. If we believed a better way of doing something was achievable and could be developed, we would have solicited competitive proposals from the broader marketplace beyond the Province.

• See also CW-3, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to R&D that was conducted to execute a multi-phase project for the development and testing of the

 <sup>&</sup>lt;sup>26</sup> C-248, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, *attaching* R&D Work Expenditure Application Form (October 23, 2013); C-212, Hibernia 2013 Board R&D Decisions, Appendix A.

The

which allows for the inspection of offshore structures and systems to detect issues requiring remediation or repair.<sup>27</sup> The Claimant argues that this expenditure is compensable because "other proven inspection methods that are not used in the [Hibernia] field, including visual inspection, are generally considered effective and satisfactory."<sup>28</sup> However, the documents state that the R&D project is being undertaken because

documents also state that the project will have "value added" because it

<sup>30</sup> Canadian taxpayers should not be required to pay the Claimant for the full extent of this value-added R&D. The Claimant has a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". <sup>31</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have incurred for development of a potential technology that it did not need. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>32</sup>

Furthermore, as Mr. Sampath testifies in his first statement, "[i]f we believed a better way of doing something was achievable and could be developed, we would have solicited competitive proposals from the broader marketplace beyond the

<sup>30</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> **CW-3**, Sampath Statement I ¶¶ 49, 50.

<sup>&</sup>lt;sup>28</sup> **CW-3**, Sampath Statement I ¶ 49.

<sup>&</sup>lt;sup>29</sup> **R-100**, EMC R&D Screening Committee Presentation (Sep. 3, 2013), slide 7 (p. MICI 0004747).

<sup>&</sup>lt;sup>31</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

<sup>&</sup>lt;sup>32</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

**Province.**" Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

# CW-10, Sampath Statement II ¶ 69

The Hibernia project did not need a new inspection method like the second statistic project did not need a new inspection method like the second statistic project and statistic project and statistic project and statistic project and the second statistic project and the second statistic project and statistic

• See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

# 4. Bioindicators (

# A. First Witness Statement(s)

## CW-8, Dunphy Statement I ¶¶ 19-20

The Bioindicators JIP, which was also developed at the HSE Workshop,<sup>33</sup> aimed to develop a set of biochemical diagnostic tools and methods to be applied as part of environmental effects assessments, monitoring activities, incident response, and research.<sup>34</sup> It was intended to measure the bioindicators of marine species in order to build a database showing the natural 'baseline' for those species. In theory, in the unlikely event of a major environmental incident offshore Newfoundland, such as an oil spill, the data collected after the incident could be compared with this baseline.

The Bioindicators project is not part of the EEM programs of Hibernia or Terra Nova, nor was it required to demonstrate an acceptably low level of risk. While the database of baseline marine data might be of interest to academic researchers, it is not something the Hibernia and Terra Nova operators would fund in the ordinary course of their business. In fact, Hibernia already has an Oil Spill EEM program in place that, in the event of a large oil spill, would use monitoring tools similar to those of the regular EEM program. The fact that the Bioindicators JIP was developed in the context of PRNL's HSE Workshop also demonstrates that it was funded to help the participating projects meet the spending requirements of the Guidelines.

- See also **CW-8**, Dunphy Statement I ¶¶ 13-14 (the fact that this R&D project came out of a PRNL workshop "is strong evidence that it would not have been done in the ordinary course of business")
- See also CW-7, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements").

<sup>&</sup>lt;sup>33</sup> C-316, HSE Workshop Voting Results: Environmental Projects (undated).

<sup>&</sup>lt;sup>34</sup> **C-322**, Letter from **Control**, HMDC, to J. Bugden, CNLOPB (June 13, 2012), *attaching* R&D Work Expenditure Application for the "Bioindicators – Diagnostic Tools for Effects Assessment of Specific Marine Life" project.

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a project aimed at developing a set of biochemical diagnostic tools and methods that can be applied as part of offshore petroleum environmental effects assessments including to oil spills. Claimant alleges that this expenditure is compensable because there is already a similar program in place at Hibernia, and this research would primarily be of interest to academic researchers.<sup>35</sup> The documents, however, indicate that

		<sup>36</sup> Speci	ifically	y, the	documents	list	several	benefits	that	the
project	would	have	to t	the Ne	wfoundland	offsho	ore envii	onment,	such	as:
					Furthe	r, the	Claima	nt notes	that	the
bioindia	cators res	search								
						<sup>38</sup> C	Canadian	taxpayer	rs sho	ould

<sup>35</sup> **CW-8**, Dunphy Statement I ¶¶ 19-20.

<sup>36</sup> **R-101**, Petroleum Research Newfoundland & Labrador Presentation, Bioindicators – A Diagnostic Tool for Effects Assessment (Undated), p. MICI 0002099.

<sup>37</sup> C-322, Letter from **Control**, HMDC to J. Bugden, CNLOPB attaching Bioindicators – Diagnostic Tools for Effects Assessment of Specific Marine Life R&D Work Expenditure Application Form (Jun. 13, 2012), p. B-1 (p. MOB0005739). See also, **R-102**, PRNL Contribution Agreement for Bioindicators – Diagnostic Tools for Effects Assessment of Specific Marine Life (Jun. 14, 2012).

<sup>38</sup> C-322, Letter from **1**, HMDC to J. Bugden, CNLOPB attaching Bioindicators – Diagnostic Tools for Effects Assessment of Specific Marine Life R&D Work Expenditure Application Form (Jun. 13, 2012), p. B-2 (p. MOB0005740). See also, **R-103**, Letter from **1**, PRNL to **1**, Suncor with attachments (Mar. 4, 2013); See also, **R-104**, Letter from **1**, PRNL to **1**, PRNL to **1**, Suncor with attachments (Mar. 21, 2014); **R-105**, Letter from **1**, PRNL to **1**, PRNL to **1**, Suncor with attachments (Feb. 27, Feb. 27).

not be required to compensate Claimant for research that would clearly be beneficial to the Claimant in managing its liabilities in the event of an oil spill, and which is in line with recommendations made by independent international agencies. The Claimant has a long-standing commitment in the Hibernia 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"<sup>39</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research".<sup>40</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>41</sup> The Mobil I Majority's recognition aligns with Mr. Dunphy's testimony from his first witness statement: "The fact that the Bioindicators JIP was developed in the context of PRNL's HSE Workshop . . . demonstrates that it was funded to help the participating projects meet the spending requirements of the Guidelines."<sup>42</sup> In addition, Mr. Dunphy's further comments in his second witness statement, copied below, reinforce the conclusion that this JIP was not undertaken in the ordinary course of Hibernia's and Terra Nova's business.

#### CW-13, Dunphy Statement II ¶¶ 12 through 16

This project aims to measure several marine species' bioindicators to develop a baseline which, in the unlikely event of a major environmental incident, could

2015); **R-106**, Email between and R. Dunphy - Re: R&D Proposals (Jul. 16, 2011); **R-107**, Email between and R. Dunphy - RE: R&D Proposal – Bioindicator (Aug. 23, 2011); **R-108**, Email between and R. Dunphy - Re: R&D proposal for bioindicators attaching Project Summary and Project Abstract (Aug. 24, 2011).

<sup>39</sup> C-37, Hibernia Decision 86.01, p. 25.

<sup>40</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

<sup>41</sup> **C-2**, Mobil I Award ¶ 67.

<sup>42</sup> **CW-8**, Dunphy Statement I  $\P$  20.

serve as a point of comparison for post-incident measurements.<sup>43</sup> I personally suggested within HMDC funding this project in response to an invitation to local industry for proposals that Newfoundland offshore operators could fund for the purpose of meeting the spending obligations under the Guidelines.<sup>44</sup> Also, I presented the concept for the Bioindicators project at the 2012 HSE workshop, whose purpose was to assist local industry in funding viable R&D projects on which to spend to help them meet the Guidelines' spending requirements.<sup>45</sup> If not for this industry-wide call for spending proposals, I most likely would never have suggested that the Bioindicators project be funded by HMDC or any other company.

Citing a PRNL document, Canada contends that the measurements taken through the Bioindicators project would be

.<sup>46</sup> I do not consider this to be an accurate quotation or interpretation of the document. In actual fact, this document simply states

#### But the Bioindicators project will not yield

Hibernia already has a separate Oil Spill EEM program in place to assess impacts on marine life, as I pointed out in my first witness statement;<sup>48</sup> this program relies on taking measurements **and the incident** location and comparing these to comparable measurements taken at a non-affected location. This Oil Spill EEM program has been approved by the Board, and from the operator's perspective, there was no reason to alter or expand it.

<sup>43</sup> **CW-8**, Dunphy Statement I ¶ 19.

<sup>44</sup> **R-106**, Email between and R. Dunphy - Re: R&D Proposals (Jul. 16, 2011), at MICI 0005339; **R-107**, Email between and R. Dunphy, RE: R&D Proposal – Bioindicator (Aug. 23, 2011), at MICI 0005343.

<sup>45</sup> **R-101**, Petroleum Research Newfoundland & Labrador Presentation, Bioindicators – A Diagnostic Tool for Effects Assessment (Undated), p. MICI 0002099; **C-316**, HSE Workshop Voting Results: Environmental Projects (undated).

<sup>46</sup> Counter Memorial Appendix A, at A-4 (citing **R-101**, Petroleum Research Newfoundland & Labrador Presentation, Bioindicators – A Diagnostic Tool for Effects Assessment (Undated), p. MICI 0002099).

<sup>47</sup> **R-101**, Petroleum Research Newfoundland & Labrador Presentation, Bioindicators – A Diagnostic Tool for Effects Assessment (Undated), p. MICI 0002099.

<sup>48</sup> **CW-8**, Dunphy Statement I  $\P$  20.

Other parts of the same PRNL document not referenced by Canada actually reinforce that the Bioindicators project went beyond what was required. In the section, the document states that

"<sup>49</sup> As this statement correctly implies, the operators were already positioned to distinguish the possible effects of a spill from natural variation thanks to the existing EEM programs. The same section of the document also states that the outcome of the Bioindicators project

." Again, this statement shows that the existing EEM programs yield adequate information, such that the most that the Bioindicators project can do is reinforce what is already known.

Canada also references a document describing some of the possibilities that could result from having a "baseline" of pre-incident biological indicators.<sup>51</sup> To be sure, the Bioindicators project measures indicators that the existing EEM programs do not. But the existing EEM programs are approved by the Board and provide adequate means for assessing the biological impact of an oil spill. In view of this regulatory acceptance, the Hibernia and Terra Nova operators had no reason to alter the existing EEM programs, apart from the need to find R&D opportunities to fund in satisfaction of the Guidelines. As I said in my first witness statement, "Once operations reach an acceptably low level of risk and are fully compliant with applicable laws and regulations, there is no need to expend additional resources in an effort to enhance environmental performance."<sup>52</sup>

Canada points out that the Bioindicators project is "in line" with recommendations made by the International Commission for the Exploration of the Sea ("ICES") and other agencies.<sup>53</sup> By this, Canada appears to imply that recommendations of the

<sup>&</sup>lt;sup>49</sup> **R-101**, Petroleum Research Newfoundland & Labrador Presentation, Bioindicators – A Diagnostic Tool for Effects Assessment (Undated), p. MICI 0002099 (emphasis added).

<sup>&</sup>lt;sup>50</sup> *Id.* (emphasis added).

<sup>&</sup>lt;sup>51</sup> Counter Memorial Appendix A, at A-4 to A-5 (citing **C-322**, Letter from **C-322**, HMDC to J. Bugden, CNLOPB attaching Bioindicators – Diagnostic Tools for Effects Assessment of Specific Marine Life R&D Work Expenditure Application Form (Jun. 13, 2012), p. B-1 (p. MOB0005739).

<sup>&</sup>lt;sup>52</sup> **CW-8**, Dunphy Statement I, at ¶ 11.

<sup>&</sup>lt;sup>53</sup> Counter Memorial Appendix A, at A-4 to A-5 (citing **C-322**, Letter from **C-322**, HMDC to J. Bugden, CNLOPB attaching Bioindicators – Diagnostic Tools for Effects Assessment of Specific Marine Life R&D Work Expenditure Application Form (Jun. 13, 2012), p. B-1 (p. MOB0005739).

ICES or other agencies caused the operators to fund the Bioindicators project. In actual fact, as HMDC's Environmental Lead, my responsibilities required me to know the environmental regulations applicable to the Hibernia project. I had never heard of the ICES or its recommendations before seeing them mentioned in Canada's Appendix A, and the ICES recommendations were not a significant factor in the operators' rationale for funding the Biondicators project. In any event, such non-binding recommendations would not have by themselves caused the operators to commit limited resources to fulfilling them.

# 5. CAE Helicopter Training Facility (\$7,500,000)

## A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 67-69

Civil Aviation Enterprise ("CAE") is one of the world's largest commercial aviation training companies. In 2014, we received a proposal from CAE to construct and to operate a pilot training center in the St. John's area.<sup>54</sup> The proposed center would include flight simulator for a Sikorsky S92 Helicopter, which is a type of helicopter that serves the structures offshore of Newfoundland and Labrador, including the Hibernia platform.

in 2014, HMDC paid

\$7.5 million.

In my opinion, the contract with CAE for construction of the pilot training center is a textbook example of how the Guidelines have impacted Hibernia's financial priorities. While we want well-trained pilots to operate the helicopters that serve the platform, HMDC would not construct a new pilot training facility for its contractors. Normally, such capital costs would be borne by the provider of the training. If it made financial sense to construct such a facility in St. John's, in the absence of the Guidelines, I believe CAE would have sought the funding from traditional financing sources.

#### What is more,

The facility is accessible to other customers (including competitors) in the Province, in Canada, and elsewhere. HMDC's funding of the CAE training facility is an uneconomic venture that made sense only in the context of us having to meet the R&D spending requirement set under the Guidelines.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra

<sup>&</sup>lt;sup>54</sup> **C-257**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB (July 3, 2014), *attaching* CAE, Helicopter Training in Newfoundland – Proposal for HMDC.

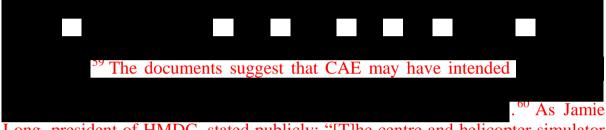
<sup>&</sup>lt;sup>55</sup> *Id.*, CAE, Helicopter Training in Newfoundland – Proposal for HMDC, at p. 10.

<sup>&</sup>lt;sup>56</sup> C-192, Hibernia 2014 Board R&D Decisions, Appendix A.

Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure concerns the construction and operation of a pilot training center in the St. John's area.<sup>57</sup> The Claimant alleges that this expenditure is compensable because "the CAE training facility is an uneconomic venture that made sense only in the context of us having to meet the R&D spending requirement set under the Guidelines." <sup>58</sup> The documents, however, state that it was HMDC's idea to establish a helicopter flight simulator in Newfoundland in order to



Long, president of HMDC, stated publicly: "[T]he centre and helicopter simulator system will contribute to the continuous improvement of our offshore safety, which is really the primary objective";<sup>61</sup> and that "[h]aving this facility in the region will increase the level of research related to helicopter operations, which we believe will contribute to improved operations and flight safety."<sup>62</sup> The benefits to HMDC include

<sup>57</sup> **CW-3**, Sampath Statement I  $\P$  67.

<sup>58</sup> **CW-3**, Sampath Statement I ¶ 69.

<sup>59</sup> **R-109**, Hibernia Executive Committee Meeting Presentation (Jan. 16, 2013), slide 6 (p. MICI 0004821). See also, **R-110**, Letter from Mike Baker, CNLOPB to K. Sampath, HMDC (Jul. 25, 2014).

<sup>60</sup> **R-109**, Hibernia Executive Committee Meeting Presentation (Jan. 16, 2013), slide 6 (p. MICI 0004821).

<sup>61</sup> **R-111**, The Telegram News Article, "Oil Company commits \$13 million for helicopter training facility" (May 29, 2015). Available at: <u>http://www.thetelegram.com/News/Local/2015-05-29/article-4163537/Oil-company-commits-\$13-million-for-helicopter-training-facility/1</u>.

<sup>62</sup> **R-112**, Newfoundland & Labrador News Release, "Hibernia Project and RDC Investing in New CAE Helicopter Training and R&D Centre" (May 29, 2015). Available at: <u>http://www.releases.gov.nl.ca/releases/2015/btcrd/0529n05.aspx.</u>

In

addition, HMDC has targeted the increase of goodwill in the local community for making the contribution. In fact, HMDC added to the contribution agreement that it  $^{64}$ 

Canadian taxpayers should not be required to compensate the Claimant for this expenditure when it accrues such significant benefits. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

Canada argues that HMDC would have committed to contribute to the construction of a contractor's helicopter training facility. As Mr. Sampath explains in his first and second witness statements, Canada's position is simply not credible. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>65</sup>

# CW-10, Sampath Statement II ¶ 85-87

Canada claims it was "HMDC's idea" to fund the construction of a helicopter training facility in St. John's to the tune of approximately (of which \$7.5 million was contributed by HMDC during the period at issue in this proceeding).<sup>66</sup> I do not know how Canada purports to know who came up with the idea for this expenditure. But I am certain that in the absence of the Guidelines, HMDC's management would never have thought to fund the construction of CAE's own helicopter training facility which would serve not just HMDC and its contractors, but anyone in any industry who might wish to use the facility. This arrangement simply does not make economic or business sense, as I remarked in my first witness statement.<sup>67</sup>

<sup>&</sup>lt;sup>63</sup> **R-113**, Letter of Agreement between CAE and HMDC for Helicopter Training in Newfoundland Project (Dec. 5, 2014), p. MICI 0002113.

<sup>&</sup>lt;sup>64</sup> *Ibid*, p. MICI 0002103.

<sup>&</sup>lt;sup>65</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>66</sup> Counter Memorial Appendix A, at A-6.

<sup>&</sup>lt;sup>67</sup> **CW-3**, Sampath Statement I ¶¶ 68-69.

Canada references quotations attributed to Jamie Long, HMDC's former president, regarding the potential benefits of this training facility to the region and local industry.<sup>68</sup> I do not disagree with these quoted statements insofar they go. But it remains true that HMDC would not have agreed to bear the costs of constructing a helicopter training facility in the Province to benefit a helicopter operating company if not for the Hibernia project's need to make Guidelines-eligible expenditures.

Canada also implies that HMDC committed to funding the multi-million dollar facility because it valued the "increase of goodwill in the local community for making the contribution."<sup>69</sup> To put it simply, the price tag of the publicity surrounding HMDC's contribution was not anywhere near worth the expenditure. For the reasons discussed at paragraphs 39 through 42 of this statement, the fact that the contribution agreement contains a provision concerning publicity does not imply that the expenditure was motivated by the potential for positive recognition.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>69</sup> *Id.* at A-7.

<sup>&</sup>lt;sup>68</sup> Counter Memorial Appendix A, at A-6 and A-7, quoting **R-111**, The Telegram News Article, "Oil Company commits \$13 million for helicopter training facility" (May 29, 2015), and **R-112**, Newfoundland & Labrador News Release, "Hibernia Project and RDC Investing in New CAE Helicopter Training and R&D Centre" (May 29, 2015)).

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# 6. Canadian Access to Centrifuge Centre (

# A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 110-112

C-CORE has a geotechnical centrifuge center in St. John's which is primarily used for commercial and industrial research. For approximately 20 years, the Canadian Government's Natural Science and Engineering Council ("NSERC") provided funds to allow Canadian academics to access the center 30% of the time. However, government cut-backs forced NSERC to cease funding of this program at the end of March 2014.

Given NSERC's withdrawal of funding, C-CORE asked HMDC to step in to provide baseline funds for the Canadian access program.<sup>70</sup> I was personally involved in reviewing C-CORE's proposal. In 2014, HMDC donated to C-CORE to continue allowing allow academics and local researchers to access the centrifuge center <sup>71</sup>.

But for the Guidelines, HMDC would not have made this contribution to C-CORE to fund its centrifuge center. The Canadian access program is for academics and researchers, including graduate students, not industry. HMDC does not gain special access or privileges by reason of its contribution. Conceivably, academics trained at the C-CORE centrifuge center may gain geotechnical experience and may one day lend their knowledge to the Hibernia project. But this uncertain and unquantifiable benefit would not justify HMDC's contribution.

• See also CW-3, Sampath Statement I ¶¶ 108-109 (explaining that unlike certain other contributions to sustain C-CORE or to commission specific research projects, the incremental expenditures discussed in his witness statement were not made in the ordinary course of business).

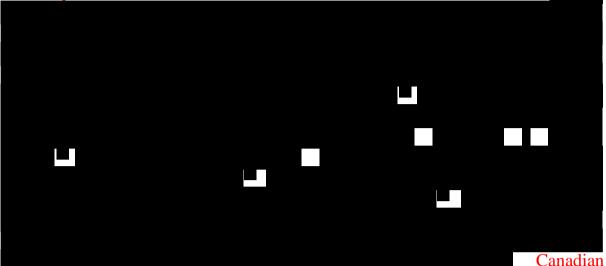
#### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to funding that was provided to C-Core for the Canadian access program which allows Canadian academics and researchers to access a

<sup>&</sup>lt;sup>70</sup> **C-282**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (January 30, 2014), *attaching* C-CORE Geotechnical Centrifuge Support R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>71</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

geotechnical centrifuge centre. <sup>72</sup> The Claimant alleges that it should be compensated for making this contribution to C-Core because it was not made in the "ordinary course" of business.<sup>73</sup> The documents, however, state that



taxpayers should not be required to pay the Claimant for this expenditure when it accrues such benefits. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinuetosupportlocalresearchinstitutions and promotefurtherresearch and development in Canada to solve problems unique to

<sup>74</sup> **C-282**, Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching C-Core Geotechnical Centrifuge Support R&D Work Expenditure Application Form (Jan. 30, 2014), p. MOB0005223.

<sup>75</sup> *Ibid*, p. MOB0005233.

- <sup>76</sup> *Ibid*, p. MOB0005225.
- <sup>77</sup> *Ibid*, p. MOB0005229.
- <sup>78</sup> *Ibid*, p. MOB0005236.
- <sup>79</sup> *Ibid*, p. MOB0005223.
- <sup>80</sup> *Ibid*, pp. MOB0005225, MOB0005228.

<sup>81</sup> **R-114**, Letter of Agreement between C-Core and HMDC for Geotechnical Centrifuge Centre (Jul. 9, 2014), p. MICI 0002116.

<sup>&</sup>lt;sup>72</sup> **CW-3**, Sampath Statement I ¶ 110.

<sup>&</sup>lt;sup>73</sup> **CW-3**, Sampath Statement I ¶¶ 109, 112.

the Canadian offshore environment."<sup>82</sup> TheClaimanthasfailedtoprovewith reasonablecertaintythatthisexpenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have provided **Sector** so that C-CORE's geotechnical centrifuge centre could remain available to Canadian academics. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>83</sup>

As Mr. Sampath states in his first statement, HMDC made this contribution only after NSERC decided to withdraw its own funding of the centrifuge centre, given that this contribution qualified for credit under the Guidelines. Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

#### CW-10, Sampath Statement II ¶¶ 121-123

Canada states that this centrifuge center was focused "in particular" on projects for ExxonMobil, based on its reading of C-CORE's proposal attached to the preapproval application for this expenditure. <sup>84</sup> I do not believe this C-CORE document is accurately represented by Canada, as the document only says the centrifuge "<sup>85</sup> Being funded by the Canadian Government's Natural Science and Engineering Council for approximately 20 years, the centrifuge is available generally to researches and companies at large. After HMDC's contribution in 2014 to maintain the facility's availability to Canadian researchers, I do not believe HMDC or any ExxonMobil affiliate has used the centrifuge.

<sup>85</sup> **C-282**, Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching C-Core Geotechnical Centrifuge Support R&D Work Expenditure Application Form (Jan. 30, 2014), p. MOB0005223).

<sup>&</sup>lt;sup>82</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>83</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>84</sup> Canada Counter Memorial Appendix A, at A-8 (citing **C-282**, Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching C-Core Geotechnical Centrifuge Support R&D Work Expenditure Application Form (Jan. 30, 2014), p. MOB0005223).

While C-CORE's proposal also appears to attribute Rex Tillerson as saying that there is a "current industry shortage" of geotechnical engineers,<sup>86</sup> I am not sure this attribution is accurate. I know that Mr. Tillerson has remarked generally on a shortage of engineers in the past, but I am unaware of him stating there is a shortage of geotechnical engineers in particular. Moreover, HMDC's contribution will not significantly address any such shortage, if one exists.

Finally, I note that contrary to Canada's insinuation,<sup>87</sup> the value of any positive recognition for HMDC's contribution did not motivate this contribution, for the reasons stated at paragraphs 39 through 42 of this statement.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>87</sup> *Id.* at A-8.

<sup>&</sup>lt;sup>86</sup> Canada Counter Memorial Appendix A, at A-8 (citing **C-282**, Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching C-Core Geotechnical Centrifuge Support R&D Work Expenditure Application Form (Jan. 30, 2014), pp. MOB0005225, MOB0005228).

# 7. CARD Annual Contributions (

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# A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 120-121

In 2010, HMDC, as operator of Hibernia, and Suncor, as operator of Terra Nova, each gave to CARD, and committed to donating an additional .<sup>88</sup> The contributions to CARD have been basically used to pay for the wages of the staffers and researchers who work at CARD. In the Mobil I arbitration, I understand the tribunal agreed that funding of CARD entailed an incremental expenditure.<sup>89</sup>

The contributions to CARD have not generated very much value for the Hibernia and Terra Nova projects.<sup>90</sup> If a project operator or owner needs a piece of Arctic-specific R&D, we would commission and direct the work, either in-house or from a contractor, and the results would be treated as proprietary information. By contrast, the intention is that CARD will be undertaking work that it is helpful to, and accessible to, any oil company seeking to develop resources in the Arctic. So the Hibernia and Terra Nova owners may well end up funding R&D that will be used by their competitors. This is not something that we would do in the ordinary course of business.

• See also CW-3, Sampath Statement I ¶¶ 117-119 (explaining that the recipient institution, CARD, was created to enable the Hibernia and Terra Nova projects to make sufficient Guidelines-eligible expenditures, meaning that "[b]ut for the Guidelines, the HMDC and Suncor would not have funded CARD or any of its research projects").

<sup>89</sup> C-2, Mobil I Award ¶¶ 119-121.

<sup>90</sup> **C-212**, Hibernia 2013 Board R&D Decisions, Appendix A (reflecting **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisions, Appendix F (reflecting **C-207**, Terra Nova 2013 Board R&D Decisio

<sup>&</sup>lt;sup>88</sup> C-288, Letter from **Constant**, HMDC, to J. Bugden, CNLOPB (March 30, 2011), *attaching* Hibernia 2010 R&D and E&T Expenditures Submission, Appendix A; C-289, Letter from **Constant**, Suncor Energy Inc., to J. Bugden, CNLOPB (March 31, 2011), attaching Suncor Annual Canada-Newfoundland and Labrador Benefits Report 2010, at p. 13; C-286, Letter from **Constant**, HMDC, to J. Bugden, CNLOPB (Aug. 2, 2010), *attaching* Hibernia Centre for Arctic Resources Development R&D Work Expenditure Application Form.

### **B.** Appendix A to Canada's Counter Memorial

This project relates to a five-year R&D expansion to C-CORE's activities. The Claimant alleges that this expenditure is compensable because "it is not necessarily applicable to the specific needs of Hibernia or Terra Nova."91 However, the documents state that The documents distinguish the Center for Arctic Resource Development ("CARD") from C-CORE, noting that C-CORE is , whereas CARD will be "well-positioned to generate longterm, mutually beneficial incentives with the local community."<sup>93</sup> Further, in 2003, the Atlantic Energy Roundtable recommended the formation of a strategic petroleum-related R&D plan for Atlantic Canada.<sup>94</sup> Canadian taxpayers should not be required to compensate the Claimant for an expenditure that will be highly relevant and useful for the Claimant in its future exploration activities. The Claimant has a long-standing commitment in the Hibernia 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"<sup>95</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research".<sup>96</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

The incremental nature of the annual contributions to CARD is *res judicata* and cannot be questioned in this proceeding. The Mobil I Majority held as follows:

<sup>92</sup> **R-115**, HMDC Appendix C: Proposed Hibernia E&T/R&D Capacity Projects, Hibernia Executive Committee Meeting (Mar. 24, 2010), slide 3 (p. MICI 0004788).

<sup>94</sup> *Ibid*, p. MOB0005332.

<sup>95</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>96</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

<sup>&</sup>lt;sup>91</sup> **CW-3**, Sampath Statement I ¶ 118.

<sup>&</sup>lt;sup>93</sup> C-286, Letter from , HMDC to J. Bugden, CNLOPB attaching Hibernia Centre for Arctic Resources Development R&D Work Expenditure Application Form (Aug. 2, 2010), p. MOB0005339.

The Majority finds that the Claimants have proven that CARD entails incremental expenditure.

CARD functions as an autonomous research facility, which, as the Claimants point out, is accessible to all and can be used by their competitors. The Majority finds particularly convincing the Claimants' observation that this type of sharing arrangement is not representative of the manner in which Projects normally carry out "ordinary course" R&D spending. The finding that this expenditure is incremental is also supported by the timing of its inception (which was in 2010), which is clearly in line with the time period when the Claimants began to comply with the Guidelines in earnest.

Further, the Majority again notes that the R&D spending commitments under the Benefits Plans (the pre-Guidelines regime) were general and unspecified. It is inappropriate for the Majority to now seek to translate these pre-Guidelines spending requirements into a particular baseline. The Respondent's arguments are thus unconvincing in this regard.<sup>97</sup>

Canada does not address, much less dispute, the Mobil I Majority's final disposition on the incremental nature of the CARD annual contributions. While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-10, Sampath Statement II ¶¶ 129-130

Canada implies that CARD fills an industry need for arctic-focused R&D.<sup>98</sup> I do not agree. More than C-CORE, its parent institution, CARD conducts research that is essentially academic in nature and is not for application to industry purposes. Thus, it is not true when Canada claims that CARD's research "will be highly relevant and useful" for "future exploration activities" by any of Mobil's affiliates.<sup>99</sup>

<sup>&</sup>lt;sup>97</sup> C-2, Mobil I Award ¶¶ 119-121 (footnotes omitted).

<sup>&</sup>lt;sup>98</sup> Canada Counter Memorial Appendix A, at A-9.

<sup>&</sup>lt;sup>99</sup> *Id*.at A-10.

Moreover, as I noted in my first witness statement, CARD's research is published and available to anyone who may want it, including the competitors of the Hibernia and Terra Nova owners who are ultimately paying for CARD's operating expenses.<sup>100</sup> Thus, if any useful knowledge comes out of CARD's research, any oil company can use it regardless of whether it has contributed to CARD in the past. This is not an arrangement HMDC or Suncor would enter into but for the fact that their contributions to CARD count toward their spending requirements under the Guidelines.<sup>101</sup>

• See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>&</sup>lt;sup>100</sup> **CW-3**, Sampath Statement I ¶ 121.

<sup>&</sup>lt;sup>101</sup> *Id.* See also paragraphs 27 through 31, above.

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### 8. CARD Subject Matter Expert Support (

### A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶ 122

Apart from its direct annual contrib	utions to CARD, HMDC has expended
additional funds to provide subject ma	
2012, <sup>102</sup> in 2013, <sup>103</sup>	in 2014, <sup>104</sup> and in 2015. <sup>105</sup> In
concrete terms, this support involved	

As with HMDC's direct monetary support to CARD, this kind of support to CARD would not have been funded in the Guidelines' absence.

• See also **CW-3**, Sampath Statement I ¶¶ 117-119 (explaining that the recipient institution, CARD, was created to enable the Hibernia and Terra Nova projects to make sufficient Guidelines-eligible expenditures, meaning that "[b]ut for the Guidelines, the HMDC and Suncor would not have funded CARD or any of its research projects").

### **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that it should be compensated for providing subject matter expertise to the Centre for Arctic Resource Development ("CARD") in Newfoundland because they would not have made the contribution in the absence of the 2004 Guidelines.<sup>106</sup> The documents, however, show that the expenditure is

<sup>105</sup> **C-251**, Hibernia January-April 2015 Board R&D Decisions, Appendix A; **C-216**, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

<sup>106</sup> **CW-3**, Sampath Statement I ¶ 122.

<sup>&</sup>lt;sup>102</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>103</sup> **C-212**, Hibernia 2013 Board R&D Decisions, Appendix A; **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>104</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

<sup>107</sup> It is thus not the Claimant that incurs the expense, but the who then passes on the expense to HMDC. This is consistent with the Claimant's acknowledgement that CARD is, among other things, "a critical mass of world-class experts in artic engineering" that "conduct[s] applied R&D to improve economics of oil and gas development in high latitudes and other ice/iceberg prone regions."<sup>108</sup> Canadian taxpayers should not be required to pay for expenses incurred by the formation of the Hibernia 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"<sup>109</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". <sup>110</sup> The Claimant has failed to prove with reasonable certainty that the full extent of this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

The Mobil I Majority found that CARD, the institution for whose benefit HMDC incurred the costs associated with Subject Matter Expert Support, "entails incremental expenditure."<sup>111</sup> It further observed:

CARD functions as an autonomous research facility, which, as the Claimants point out, is accessible to all and can be used by their competitors. The Majority finds particularly convincing the Claimants' observation that this type of sharing arrangement is not representative of the manner in which Projects normally carry out "ordinary course" R&D spending. The finding that this expenditure is incremental is also supported by the timing of its inception (which

, ExxonMobil Canada and Multiple Recipients

<sup>&</sup>lt;sup>107</sup> **R-116**, Emails between (Apr. 23-30, 2013), p. 1 (p. MICI 0002119).

<sup>&</sup>lt;sup>108</sup> **R-115**, HMDC Appendix C: Proposed Hibernia E&T/R&D Capacity Projects, Hibernia Executive Committee Meeting (Mar. 24, 2010), slide 3 (p. MICI 0004788).

<sup>&</sup>lt;sup>109</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>110</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

<sup>&</sup>lt;sup>111</sup> **C-2**, Mobil I Award ¶ 119.

was in 2010), which is clearly in line with the time period when the Claimants began to comply with the Guidelines in earnest.<sup>112</sup>

Given that CARD itself would not have been founded but for the Guidelines, the expenditures for a subject matter expert to participate in CARD's steering committee would likewise have not been incurred in the ordinary course of business. Mr. Sampath's further observations in his second witness statement, copied below, reinforce this conclusion.

CW-10, Sampath Statement II ¶ 131

As I acknowledged in my first witness statement, this expenditure accounts for the costs of If not for HMDC's contributions to establish and to sustain CARD, there would not be a CARD in the first place. which is noted in the email referenced by Canada. The Board allows operators to apply costs associated with Subject Matter Experts ("SMEs") towards their obligations because this is another form of technology transfer.<sup>115</sup>

towards their obligations because this is another form of technology transfer.<sup>115</sup> This is why this expenditure is charged to HMDC. Thus, I do not believe it is correct for Canada to claim that these expenses are "incurred by"

• See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")

<sup>112</sup> *Id.* ¶ 120.

<sup>113</sup> **CW-3**, Sampath Statement I ¶ 122.

<sup>114</sup> Canada's Counter Memorial Appendix A, at A-10 (citing **R-116**, Emails between **R**, ExxonMobil Canada and Multiple Recipients (Apr. 23-30, 2013), p. 1 (p. MICI 0002119)).

<sup>115</sup> **R-116**, Email from (HMDC) to J. Long (HMDC) of April 26, 2013, at p. MICI 0002119; **C-367**, Emails between (HMDC) and J. Bugden (C-NLOPB) of January 31 to February 1, 2012 (Subject: R&D, E&T Expense Eligibility Question).

<sup>116</sup> Canada's Counter Memorial Appendix A, at A-11.

### 9. Choices for Youth - Train for Trades Program (\$2,100,000)

### A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 148-149

Choices for Youth is a not-for-profit organization that creates and delivers a variety of programs aimed at at-risk youth in St. John's. One of these programs, known as Train for Trades, provides job training and mentoring to transition young men and women into stable employment, primarily in the construction industry.<sup>117</sup>

HMDC made a contribution of \$2.1 million in 2012 to the Train for Trades program to support more work term participants, to deliver education and training to participants, and to hire additional staffers.<sup>118</sup> Prior to its 2012 contribution, HMDC had not made any contribution to any Choices for Youth program. Moreover, since the program focuses on onshore construction, the program participants receive training in trades and skills that have little application to supporting offshore projects like Hibernia, and so it is unlikely that this program would meaningfully expand the local labor pool in a way that could benefit Hibernia.

• See also CW-3, Sampath Statement I ¶¶ 132-136 (testifying that "it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated", and additionally testifying that before the Guidelines were enforced, "between 2000 and 2009, HMDC had budgeted in annual community contributions", yet contributions leapt to nearly in 2011 alone, and this leap "is exclusively attributable to the introduction of the Guidelines").

### **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that this expenditure is compensable because it is a "community contribution" that was only undertaken as a result of the 2004

<sup>&</sup>lt;sup>117</sup> **C-311**, Letter from **Control**, HMDC, to J. Bugden, CNLOPB (November 6, 2012), *attaching* Choices for Youth – Train for Trades R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>118</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B.

Guidelines. <sup>119</sup>
<sup>120</sup> 79% of youth who go through the
program either go on to full time employment or further education. <sup>121</sup> HMDC
has targeted the increase of goodwill in the local community for making the
contribution.
. Canadian taxpayers should not be required to compensate the
Claimant for contributing to the local community and taking credit for it. The
Claimant has failed to prove with reasonable certainty that this expenditure is

compensable.

### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have provided a community contribution of \$2.1 million to Choices for Youth. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>123</sup>

Before the enforcement of the Guidelines, HMDC did not make community contributions of this magnitude, and made no contributions to Choices for Youth. Indeed, in the Mobil I Arbitration, Canada did not even challenge the vast majority of the community contributions, which the Mobil I Majority awarded.<sup>124</sup> Mr.

<sup>121</sup> **R-118**, Letter from **121**, HMDC to Jeff Bugden, CNLOPB attaching Choices for Youth – Train for Trades – Transition to Self-Sustaining Program R&D/E&T Work Expenditure Application Form (Nov. 6, 2012), p. MICI 0002124

<sup>122</sup> **R-119**, Letter of Agreement between Choices for Youth and HMDC for Train for Trades Program (Nov. 29, 2012), p. MICI 0002127.

<sup>123</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

 $^{124}$  C-2, Mobil I Award ¶ 128-129 & n.62 (noting that Canada accepted the compensability of claimed community contributions and awarding them as incremental expenditures).

<sup>&</sup>lt;sup>119</sup> **CW-3**, Sampath Statement I ¶ 149.

<sup>&</sup>lt;sup>120</sup> **R-117**, EMC R&D Screening Committee Presentation (May 3, 2012), slide 11 (p. MICI 0004687).

Sampath's additional testimony in his second witness statement only reinforces the conclusion that this \$2.1 million community contribution—in addition to the millions of dollars in other community contributions claimed in this proceeding—is incremental.

### CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

••••

• Choices for Youth - Train for Trades Program;<sup>125</sup>

. . . .

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>126</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>127</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>128</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly

<sup>126</sup> *Id.* ¶ 133.

<sup>127</sup> *Id*.

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<sup>&</sup>lt;sup>125</sup> **CW-3**, Sampath Statement I ¶ 148-149.

<sup>&</sup>lt;sup>128</sup> **CW-3**, Sampath Statement I ¶ 132. See also paragraphs 39 through 42, above.

given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining that none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, as "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

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### 10. Cold Climate Oil Spill Response Research Facility (

#### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 75-76

The aim of this JIP was to conduct a market study to determine whether there was demand for a cold climate oil spill research facility located in Newfoundland and Labrador.<sup>129</sup> In 2012, HMDC and Suncor each contributed **on behalf of** Hibernia and Terra Nova, respectively, to research the existence of such demand.<sup>130</sup>

The facility contemplated by this JIP would have effectively duplicated Ohmsett, a prominent oil spill response facility that already exists in New Jersey.<sup>131</sup> If not for the Guidelines, HMDC and Suncor would not have paid to conduct a market study for a facility in Newfoundland and Labrador that already exists elsewhere.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a joint-industry project for an Arctic and Cold Climate Oil Spill Response Research Facility. The Claimant alleges that this expenditure is compensable because it would have largely duplicated the existing oil-spill response facility in New Jersey.<sup>132</sup> The project description, however, notes that it would create

<sup>&</sup>lt;sup>129</sup> C-262, Letter from **Control**, HMDC, to J. Bugden, CNLOPB (November 19, 2012), *attaching* Arctic and Cold Climate Oil Spill Response Research Facility R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>130</sup> C-206, Hibernia May-December 2012 Board R&D Decisions, Appendix A; C-207, Terra Nova 2012 Board R&D Decisions, Appendix F.

<sup>&</sup>lt;sup>131</sup> **C-263**, Ohmsett Facility, http://ohmsett.com/facility.html (undated).

<sup>&</sup>lt;sup>132</sup> **CW-3**, Sampath Statement I  $\P$  76.

#### The documents further state that

.<sup>134</sup> Canadian taxpayers should not be required to compensate the Claimant for an innovative research facility which is, by the Claimant's own admission, highly relevant to .<sup>135</sup> The Claimant has a long-standing commitment in the Hibernia

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"<sup>136</sup> and to undertake and support "research to develop effective countermeasures...to minimize oil spills from ALPs and subsea components due to iceberg impact", <sup>137</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research".<sup>138</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>139</sup>

135 Ibid.

<sup>136</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>137</sup> C-37, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

<sup>138</sup> C-41, Terra Nova Decision 97.01, p. 23.

<sup>139</sup> **C-2**, Mobil I Award ¶ 67.

<sup>&</sup>lt;sup>133</sup> **R-120**, Presentation: Arctic and Cold Climate Oil Spill Research Facility (Undated), p. MICI 0002143.

<sup>&</sup>lt;sup>134</sup> C-262, Letter from **Control**, HMDC to J. Bugden, CNLOPB attaching Arctic and Cold Climate Oil Spill Response Research Facility R&D Work Expenditure Application Form (Nov. 19, 2010), p. A-1 (p. MOB0005010).

In addition, PRNL was designated to manage this JIP.<sup>140</sup> This fact further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>141</sup>

Mr. Sampath's further observations about this expenditure, copied below, reinforce the conclusion that the Hibernia and Terra Nova operators would not have funded this JIP in the ordinary course of business.

### CW-10, Sampath Statement II ¶¶ 94-95

This JIP involved a market study into the potential local demand for a cold climate oil spill research facility. In opposing Mobil's claim for compensation in respect of this expenditure, Canada has quoted from documents describing the background to this study.<sup>142</sup> It is not clear to me what point Canada is trying to make with these quotations, which do not contradict my conclusion that neither HMDC nor Suncor would have paid for a market study of this nature. To the extent that oil spill response research facilities may be helpful for training or research purposes, the industry has access to a number of existing alternatives around the world.<sup>143</sup>

In any event, I recall that the study's conclusion was that

Since the study was completed, I am not aware of any concrete advances toward the establishment of an oil spill response facility in the

<sup>&</sup>lt;sup>140</sup> **C-262**, Letter from **Control**, HMDC, to J. Bugden, CNLOPB, attaching Arctic and Cold Climate Oil Spill Response Research Facility R&D Work Expenditure Application Form (November 19, 2012), at p. MOB0005009.

<sup>&</sup>lt;sup>141</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>&</sup>lt;sup>142</sup> *Id.* at A-12 (quoting **C-262**, Letter from **Constant of**, HMDC to J. Bugden, CNLOPB attaching Arctic and Cold Climate Oil Spill Response Research Facility R&D Work Expenditure Application Form (Nov. 19, 2010)).

<sup>&</sup>lt;sup>143</sup> **CW-3**, Sampath Statement I  $\P$  76.

<sup>&</sup>lt;sup>144</sup> **R-196**, Arctic and Cold Oceans OSR Laboratory Facility – Phase 1 Final Report (Undated), p.
6.

Province other than a follow-up C-CORE study funded by HMDC, which I discuss further below.<sup>145</sup>

<sup>&</sup>lt;sup>145</sup> See paragraphs 125 through 127, below.

# 11.Development of Ice Ridge Keel Strengths Enhancement Project (\$586,000)

### A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 130-131

Development of Ice Ridge Keel Strengths ("DIRKS") is a four-year CARD project to investigate the risks to subsea infrastructure associated with gouging by ice ridge keels.<sup>146</sup> A keel is the part of an ice pressure ridge that extends down beneath the water and makes contact with the seabed. When pressure ridges drift into shallower areas, they may gouge the seabed and disrupt buried pipelines. The risks of keel gouging are well known in the arctic offshore industry and pipelines in arctic regions are designed and installed with this risk in mind.

The enhancement component of the DIRKS project, which HMDC funded in 2013 (\$586,000), <sup>147</sup> aimed to analyze and to understand the gouging process with additional laboratory experiments and numerical modeling.<sup>148</sup> Neither the core DIRKS project nor the enhancement component has any immediate application to Hibernia. Hibernia's subsea infrastructure is already installed, and it is unlikely that any modifications would be made as a result of the DIRKS project.

• See also CW-3, Sampath Statement I ¶¶ 117-119 (explaining that the recipient institution, CARD, was created to enable the Hibernia and Terra Nova projects to make sufficient Guidelines-eligible expenditures, meaning that "[b]ut for the Guidelines, the HMDC and Suncor would not have funded CARD or any of its research projects").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to R&D that was conducted to investigate the risks to subsea infrastructure associated with gouging by ice ridge keels.<sup>149</sup> The Claimant

<sup>&</sup>lt;sup>146</sup> **C-294**, https://www.card-arctic.ca/DIRKSProject (undated).

<sup>&</sup>lt;sup>147</sup> **C-212**, Hibernia 2013 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>148</sup> C-295, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (September 26, 2013), *attaching, inter alia*, DIRKS Enhancement Project R&D Work Expenditure Form.

<sup>&</sup>lt;sup>149</sup> **CW-3**, Sampath Statement I ¶ 130.

Α

alleges that this expenditure is compensable because "[n]either the core DIRKS project not the enhancement component has any immediate application to Hibernia."<sup>150</sup> The documents, however, state that the incentive of the project is to develop

"keel" is part of an ice pressure ridge that extends down beneath the water and makes contact with the seabed and this project is designed to help reduce damage as a result of "gouging" from keels.<sup>152</sup> The research will thus be valuable to the Claimant at its other projects, especially in the offshore area. Canadian taxpayers should not be required to compensate the Claimant for funding research that will allow it to improve its offshore operations. The

Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasures...to minimize oil spills from ALPs and subsea components due to iceberg impact."<sup>153</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

The Mobil I Majority found that CARD, the recipient institution of the expenditures for the DIRKS enhancement project, "entails incremental expenditure."<sup>154</sup> It further observed:

CARD functions as an autonomous research facility, which, as the Claimants point out, is accessible to all and can be used by their competitors. The Majority finds particularly convincing the Claimants' observation that this type of sharing arrangement is not

<sup>&</sup>lt;sup>150</sup> **CW-3**, Sampath Statement I ¶ 131.

<sup>&</sup>lt;sup>151</sup> **R-121**, EMC R&D Screening Committee Presentation (Nov. 16, 2012), slide 10 (p. MICI 0004719).

<sup>&</sup>lt;sup>152</sup> **CW-3**, Sampath Statement I ¶ 130.

<sup>&</sup>lt;sup>153</sup> **C-37**, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

<sup>&</sup>lt;sup>154</sup> **C-2**, Mobil I Award ¶ 119.

representative of the manner in which Projects normally carry out "ordinary course" R&D spending. The finding that this expenditure is incremental is also supported by the timing of its inception (which was in 2010), which is clearly in line with the time period when the Claimants began to comply with the Guidelines in earnest.<sup>155</sup>

Given that CARD itself would not have been founded but for the Guidelines, the expenditures for CARD's DIRKS enhancement project would likewise have not been incurred in the ordinary course of business. Mr. Sampath's further observations in his second witness statement, copied below, reinforce this conclusion.

### CW-10, Sampath Statement II ¶ 138

The enhancement component of the Development of Ice Ridge Keel Strengths ("DIRKS") project, like the core DIRKS project, has no potential application to Hibernia given that its subsea infrastructure is already installed and will not be redesigned.<sup>156</sup> As I explain at paragraphs 22 thorough 26 of this statement, the inapplicability of this research study to the Hibernia project shows it would not have been funded in the ordinary course of business. Also, I disagree with Canada's contention that this study will be valuable to other projects in which Mobil affiliates may have an interest,<sup>157</sup> as I am not aware of any project in ExxonMobil's worldwide portfolio where the results of the DIRKS project could be applied.

• See also CW-10, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

<sup>155</sup> *Id.* ¶ 120.

<sup>&</sup>lt;sup>156</sup> **CW-3**, Sampath Statement I ¶ 131.

<sup>&</sup>lt;sup>157</sup> Counter Memorial Appendix A, at A-13 to A-14.

### 12.Drift and Divergence of Ice Floes Project (\$763,518)

### A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 125-126

This CARD project involves collection of data in the Labrador Marginal Ice Zone regarding ice floe dynamics, surface winds, and surrounding surface ocean currents.<sup>158</sup>

The data collected can

be used to study ice field convergences affecting pack ice pressures.

HMDC contributed \$763,518 in 2015 to CARD's Drift and Divergence of Ice Floes Project.<sup>159</sup> Basic studies on ice floes are not the kind of research that are needed to support Hibernia project operations. Also, it bears repeating that the Hibernia field is located off the coast of Newfoundland, not Labrador, making the data collected of no relevance to the Hibernia project.

• See also **CW-3**, Sampath Statement I ¶¶ 117-119 (explaining that the recipient institution, CARD, was created to enable the Hibernia and Terra Nova projects to make sufficient Guidelines-eligible expenditures, meaning that "[b]ut for the Guidelines, the HMDC and Suncor would not have funded CARD or any of its research projects").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to the collection of data in the Labrador Marginal Ice Zone regarding ice floe dynamics to be used to study ice field convergences affecting pack ice pressures.<sup>160</sup> The Claimant alleges that this expenditure is compensable because "[b]asic studies on ice floes are not the kind of research

<sup>&</sup>lt;sup>158</sup> **C-291**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB (October 30, 2014), *attaching* Drift and Divergence of Ice Floes R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>159</sup> **C-251**, Letter from M. Baker, CNLOPB, to J. Long, HMDC (July 3, 2015), *attaching* Hibernia January-April 2015 Board R&D and E&T Expenditure Spreadsheets and Eligibility Determinations, Appx. Decisions, Appendix A.

<sup>&</sup>lt;sup>160</sup> **CW-3**, Sampath Statement I ¶ 125.

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that are needed	to suppor	rt Hibern	ia pro	ject	operati	ons." <sup>161</sup>	The	Claima	ant's
documents state,									
					The	documents	s also	o state	that
the data collected	are ideal								
			They	ever	n state	that			
				(	Canadia	n taxpayer	s sho	ould no	ot be

required to compensate the Claimant for its own R&D, which is of direct value to the Claimant or other entities within ExxonMobil. The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken".<sup>165</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

The Mobil I Majority found that CARD, the recipient institution of the expenditures for the Drift and Divergence of Ice Floes project, "entails incremental expenditure."<sup>166</sup> It further observed:

CARD functions as an autonomous research facility, which, as the Claimants point out, is accessible to all and can be used by their competitors. The Majority finds particularly convincing the Claimants' observation that this type of sharing arrangement is not representative of the manner in which Projects normally carry out "ordinary course" R&D spending. The finding that this expenditure

<sup>163</sup>*Ibid*.

<sup>164</sup>*Ibid*, p. MOB0005425

<sup>165</sup> **C-37**, Hibernia Decision 86.01, p. 82

<sup>166</sup> **C-2**, Mobil I Award ¶ 119.

<sup>&</sup>lt;sup>161</sup> **CW-3**, Sampath Statement I ¶ 126.

<sup>&</sup>lt;sup>162</sup>**C-291**, Letter from K. Sampath, HMDC to C. Dyer, CNLOPB attaching Drift and Divergence of Ice Floes R&D Work Expenditure Application Form (Oct. 30, 2014), p. MOB0005427

is incremental is also supported by the timing of its inception (which was in 2010), which is clearly in line with the time period when the Claimants began to comply with the Guidelines in earnest.<sup>167</sup>

Given that CARD itself would not have been founded but for the Guidelines, the expenditures for CARD's Drift and Divergence of Ice Floes project would likewise have not been incurred in the ordinary course of business. Mr. Sampath's further observations in his second witness statement, copied below, reinforce this conclusion.

### CW-10, Sampath Statement II ¶¶ 134-135

This basic study on ice floes off of the Labrador coastline was not research needed to support Hibernia project operations which take place far offshore of Newfoundland.<sup>168</sup> Moreover, the applicability of the results of this study of iceberg floes off of Labrador could well not be applicable to other regions where the oil industry may have active or planned projects.

had some input in the design of this project, as Canada notes, which is why there are references to ExxonMobil in the pre-approval application.<sup>169</sup> But involvement does not mean it or any ExxonMobil affiliate would have funded this project, for the reasons stated at paragraphs 32 through 38 of this statement. Moreover, there is no project in the Arctic or elsewhere on the horizon of any ExxonMobil affiliate where this research might be of use or value.

• See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")

<sup>&</sup>lt;sup>167</sup> *Id.* ¶ 120.

<sup>&</sup>lt;sup>168</sup> *Id.* ¶ 126.

<sup>&</sup>lt;sup>169</sup> Counter Memorial Appendix A, at A-15.

#### 13. Dual Polarized Radar (

#### )

### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 26-27

Rutter Inc. ("Rutter") is a company based in St. John's that offers a variety of radar technologies to the offshore industry in eastern Canada and elsewhere. PRNL coordinated a joint-industry project ("JIP") for Rutter to develop and field test a multifunctional radar system capable of providing enhanced detection of ice.<sup>170</sup> If successful, Rutter developed through the Dual Polarized Radar JIP.

On behalf of the Hibernia project, HMDC contributed to this JIP in 2012 (after April 30 of that year)<sup>171</sup> and the in 2013,<sup>172</sup> and Suncor contributed in 2012<sup>173</sup> and the in 2013 on behalf of the Terra Nova project. I understand that the operators of the Hebron and White Rose projects made contributions, as well.<sup>175</sup> If radar upgrades were needed for operations, the project operators would ordinarily seek an off-the-self solution or otherwise follow their standard procurement processes. They would not join with their competitors to fund Rutter's development of a new radar technology that they would not own.

<sup>171</sup> **C-206**, Letter from J. Bugden, CNLOPB, to J. Long, HMDC (June 7, 2013), *attaching* Hibernia May-December 2012 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations (hereafter, "Hibernia May-December 2012 Board R&D Decisions"), Appendix A.

<sup>172</sup> **C-212**, Letter from M. Baker, CNLOPB, to J. Long, HMDC (May 20, 2014), *attaching* Hibernia 2013 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations (hereafter, "Hibernia 2013 Board R&D Decisions"), Appendix A.

<sup>173</sup> C-207, Letter from J. Bugden, CNLOPB, to **175**, Suncor Energy Inc. (June 7, 2013), *attaching* Tera Nova 2012 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations (hereafter, "Terra Nova 2012 Board R&D Decisions"), Appendix F.

<sup>174</sup> **C-230**, Letter from M. Baker, CNLOPB, to **Constant**, Suncor Energy Inc. (May 20, 2014), *attaching* Tera Nova 2013 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations (hereafter, "Terra Nova 2013 Board R&D Decisions"), Appendix F.

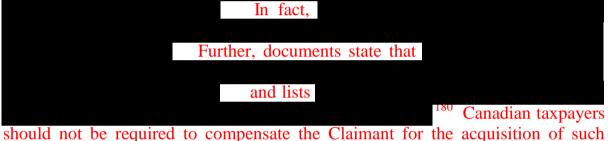
<sup>175</sup> **C-229**, PRNL, Contribution Agreement regarding the Project "Dual Polarized Ice Detection and Navigation Radar Research and Development" dated March 1, 2012.

<sup>&</sup>lt;sup>170</sup> **C-229**, PRNL, Contribution Agreement regarding the Project "Dual Polarized Ice Detection and Navigation Radar Research and Development" dated March 1, 2012, Annex B.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a project intended to build and test an advanced "dual polarized" radar system to distinguish between The Claimant alleges that this expenditure is compensable because operators would generally seek an off-the-shelf solution if upgrades were needed rather than join with their competitors, and there was no need for the program at Hibernia or Terra Nova.<sup>176</sup> However, documents show that enhancements are necessary for



knowledge that it can apply to its future arctic offshore operations, which by its own admission, is R&D would have been conducted in Houston, at most only any increased cost of undertaking this expenditure in Newfoundland can be claimed. The Claimant has a

<sup>176</sup> **CW-3**, Sampath Statement I ¶ 27.

<sup>177</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002763

<sup>178</sup> C-229, PRNL, Contribution Agreement for "Dual Polarized Ice Detection and Navigation Radar Research and Development (Mar. 1, 2012), p. MOB0004444.

<sup>179</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002722.

<sup>180</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002723.

<sup>181</sup> **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003215.

long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken",<sup>182</sup> and a long-standing commitment in the Terra Nova Benefits Plan to undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of low-lying masses of floating ice."<sup>183</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>184</sup>

In addition, PRNL's involvement in organizing this JIP<sup>185</sup> further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>186</sup>

Mr. Sampath's further observations about this expenditure, copied below, reinforce the conclusion that the Hibernia and Terra Nova operators would not have funded this JIP in the ordinary course of business.

<sup>186</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>&</sup>lt;sup>182</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>&</sup>lt;sup>183</sup> **C-41**, Terra Nova Decision 97.01, p. 47

<sup>&</sup>lt;sup>184</sup> **C-2**, Mobil I Award ¶ 67.

<sup>&</sup>lt;sup>185</sup> C-229, PRNL, Contribution Agreement regarding the Project "Dual Polarized Ice Detection and Navigation Radar Research and Development" dated March 1, 2012.

### CW-10, Sampath Statement II ¶¶ 46-48

This purpose of this project was to permit an external vendor, Rutter, to develop and field test a multifunctional radar system capable of providing enhanced detection of ice.<sup>187</sup> HMDC would not have paid a contractor to develop its own proprietary technology, as I explained in my first witness statement<sup>188</sup> and in paragraphs 27 to 31 of this statement.

In addition, it is noteworthy that the notion of developing a dual polarized radar was specifically raised and evaluated at a joint industry workshop organized by PRNL's predecessor, Petroleum Research Atlantic Canada ("PRAC").<sup>189</sup> This workshop was organized specifically to help the industry participants identify R&D projects that they could jointly fund for purposes of meeting the Guidelines' expenditure obligations.

Any actual or expected benefits of Rutter's development of dual polarized radar technology, being unnecessary to operations at the Hibernia and Terra Nova projects, would not have caused HMDC or Suncor to provide this funding in the ordinary course of business.<sup>190</sup> In fact, I do not know if Rutter ever managed to develop a dual polarized radar through this JIP.

• See also CW-10, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

<sup>&</sup>lt;sup>187</sup> **CW-3**, Sampath Statement I  $\P$  26.

<sup>&</sup>lt;sup>188</sup> *Id.* ¶ 27.

<sup>&</sup>lt;sup>189</sup> C-364, PRAC, Ice Management Program SME Workshop August 17, 2011 (Undated), at pp. 3-4.

<sup>&</sup>lt;sup>190</sup> See paragraphs 22 through 26, above.

)

### 14. Dynamic Monitoring of Shallow-Water Wells Project (

### A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 77-78

The purpose of this project is to take real-time measurements during drilling operations by a vessel offshore Newfoundland in shallow waters, specifically,

In theory, the data collected could lead to
In 2015, HMDC provided in funding for this project and incurred
in subject matter expert support. <sup>192</sup> HMDC would not have done so if not
for the Guidelines. The main driver for the research was
This project consists of general research
and is not needed by the Hibernia project for maintaining safe operations.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to research in support of drilling shallow water wells. The Claimant alleges this expenditure is compensable because it "is not needed by the Hibernia project for maintaining safe operations."<sup>193</sup> The documents, however, confirm that and that the research is important to ExxonMobil's worldwide operations. The Claimant's witness admits

<sup>&</sup>lt;sup>191</sup> **C-264**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB (October 14, 2014), *attaching* Dynamic Monitoring of Shallow Water Wells Project R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>192</sup> C-251, Hibernia January-April 2015 Board R&D Decisions, Appendix A; C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

 $<sup>^{193}</sup>$  CW-3, Sampath Statement I ¶ 78. See also, **R-123**, Letter from Mike Baker, CNLOPB to K. Sampath, HMDC (Nov. 5, 2014).

that
ExxonMobil values this research because
Documents
confirm this research is necessary because
<sup>197</sup> Further, the research also has application to
. <sup>198</sup> Canadian taxpayers
should not be required to compensate the Claimant for its value-added R&D. The
Claimant has a long-standing commitment in the Hibernia 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." <sup>199</sup> The Claimant has failed to prove with reasonable certainty that

this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have contributed over **sector** to study wellhead fatigue models in shallow waters. This is just another instance

<sup>197</sup> Ibid.

<sup>198</sup> *Ibid*, p. MICI 0002196.

<sup>199</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>194</sup> **CW-3**, Sampath Statement I ¶¶ 77-78.

<sup>&</sup>lt;sup>195</sup> **R-124**, Letter from K. Sampath, HMDC to Colin Dyer, CNLOPB attaching Dynamic Monitoring of Shallow Water Wells Project R&D/E&T Work Expenditure Application Form (Oct. 14, 2014), p. MICI 0002197.

<sup>&</sup>lt;sup>196</sup> *Ibid*.

of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>200</sup>

As Mr. Sampath testifies in his first statement, HMDC did not need this research to maintain safe operations. Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure, particularly given that the data would be available to Mobil's competitors.

### CW-10, Sampath Statement II ¶¶ 96-97

#### This R&D project involves taking real-time measurements

As I noted in my first witness statement, As I noted in my first witness argue that this circumstance means this R&D project would have been funded even in the absence of the Guidelines, I do not agree for the reasons already discussed at paragraphs 32 through 38 of this statement.

<sup>202</sup> This is not an arrangement that HMDC or ExxonMobil affiliates would agree to in the ordinary course of business, as I discuss at paragraphs 27 through 31 of this statement.

- See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")
- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)
- See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but

<sup>&</sup>lt;sup>200</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>201</sup> **CW-3**, Sampath Statement I  $\P$  78.

<sup>&</sup>lt;sup>202</sup> **R-124**, Letter from K. Sampath, HMDC to Colin Dyer, CNLOPB attaching Dynamic Monitoring of Shallow Water Wells Project R&D/E&T Work Expenditure Application Form (Oct. 14, 2014), at MICI0002197.

that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

### 15. Dynamic Positioning in Ice (

### A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 38-39

HMDC for Hibernia and Suncor for Terra Nova funded this JIP to study possible enhancements to dynamic positioning system technologies for ship operations in ice prone environments.<sup>203</sup> The JIP included measurement of environmental forces on ships

In 2014, HMDC (for Hibernia) and Suncor (for Terra Nova) each contributed to this JIP.<sup>204</sup> In 2015, HMDC made a further contribution of <sup>205</sup> and I understand that Suncor made a matching contribution that year, as well.<sup>06</sup> As with the Ice Loads on Floating Structures JIP that I discuss above, the Dynamic Positioning in Ice JIP is particularly irrelevant to Hibernia given that it is operated from a gravity base structure. This JIP does not have much greater relevance to Terra Nova, either; if Suncor needed the results of this JIP to successfully manage the Terra Nova project, which is operated from a Floating Production, Storage and Offloading vessel ("FPSO"), it would have undertaken the research long ago.

• See also CW-3, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

<sup>&</sup>lt;sup>203</sup> C-239, PRNL, Contribution Agreement regarding the Project "Dynamic Positioning in Ice Environments" dated January 14, 2013, Annex A.

<sup>&</sup>lt;sup>204</sup> C-192, Letter from M. Baker, CNLOPB, to J. Long, HMDC (June 1, 2015), *attaching* Hibernia 2014 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations (hereafter, "Hibernia 2014 Board R&D Decisions"), Appendix A; C-240, Letter from M. Baker, CNLOPB, to Suncor Energy Inc. (June 1, 2015), *attaching* Terra Nova 2014 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations (hereafter, "Terra Nova 2014 Board R&D Decisions"), Appendix F.

 $<sup>^{205}</sup>$  C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

<sup>&</sup>lt;sup>206</sup> **C-241**, Draft Terra Nova 2015 R&D and E&T Expenditures Report.

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a project aimed at improving the safety and efficiency of oil and gas operations in ice environments through the enhancement of dynamic positioning system technologies for ship operations. The Claimant alleges that this expenditure is compensable because there was no need for the program at Hibernia or Terra Nova.<sup>207</sup> However, the documents state that this research is relevant to

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that													
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		Proje	ct driv	vers f	for this	rese	earch	are					
		Spec	ificall	y, it	t will	de	velop						
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<sup>213</sup> Canadian taxpayers should not be required to pay the Claimant for its value-added research toward future operations. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake "research and development to improve the ability to detect and manage ice under adverse weather conditions",<sup>214</sup> and a long-standing commitment in the Terra Nova Benefits Plan to undertake "a continuous program of observation and research that leads to the

<sup>207</sup> **CW-3**, Sampath Statement I ¶ 39.

<sup>208</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002780.

<sup>209</sup> *Ibid*, p. MICI 0002782.

<sup>210</sup> *Ibid*, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002723

<sup>211</sup> *Ibid*.

<sup>212</sup> **R-125**, Letter from **Constant and Second Sec** 

<sup>213</sup> *Ibid*.

<sup>214</sup> **C-37**, Hibernia Decision 86.01, p. 82.

improvement of radar and other remote sensing devices that will make possible the early detection of low-lying masses of floating ice."<sup>215</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>216</sup>

In addition, PRNL's involvement in organizing this JIP<sup>217</sup> further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>218</sup>

Mr. Sampath's further observations about this expenditure, copied below, reinforce the conclusion that the Hibernia and Terra Nova operators would not have funded this JIP in the ordinary course of business.

### CW-10, Sampath Statement II ¶¶ 59-60

The dynamic positioning, or "station keeping", systems studied by this JIP were not needed for the Hibernia or Terra Nova projects, as I explained in my first witness statement.<sup>219</sup> Thus, a business case for this research could not have been made for either HMDC or Suncor to fund this research with joint account funds. Moreover, this JIP was initiated during workshops organized through C-CORE and

<sup>&</sup>lt;sup>215</sup> **C-41**, Terra Nova Decision 97.01, p. 47.

<sup>&</sup>lt;sup>216</sup> **C-2**, Mobil I Award ¶ 67.

<sup>&</sup>lt;sup>217</sup> C-239, PRNL, Contribution Agreement regarding the Project "Dynamic Positioning in Ice Environments" dated January 14, 2013.

<sup>&</sup>lt;sup>218</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>&</sup>lt;sup>219</sup> **CW-3**, Sampath Statement I  $\P$  39.

PRNL for the specific purpose of assisting local industry to find Guidelineseligible projects to fund.<sup>220</sup>

Canada suggests that this project might have application to future Arctic operations.<sup>221</sup> For the reasons discussed at paragraphs 22 to 26 of this statement, this factor would not have motivated the Hibernia and Terra Nova operators to fund this research. Moreover, I am unaware of any current or planned FPSO project that could take advantage of the results of this research into dynamic positioning systems.

• See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

<sup>&</sup>lt;sup>220</sup> **C-234**, C-CORE, Development of Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), at MOB0004533.

<sup>&</sup>lt;sup>221</sup> Counter Memorial Appendix A, A-18 through A-19.

### 16.

### A. First Witness Statement(s)

### CW-7, Durdle Statement I ¶¶ 36-38

This	s JIP,	admir	istered	d throu	gh l	PRN	L, ez	xamin	es the	e effe	ective	eness	s of	f	
															. It
is h	loped	that		can	be	used	d to	train	offsh	ore	work	cers	to	respond	t to
eme	rgenc	cies.													
												Thi	s JI	P's pur	oose
was	to e	valuate	the e	effectiv	enes	s of	usi	ng							
				for t	train	ing	and	drills	for	diffe	erent	type	es o	of poter	ntial
user	s.														

HMDC would not have contributed to this JIP in the ordinary course of business. While data on the effectiveness of various training alternatives is something we might appreciate having, funding original research into training alternatives,

, is another question. We would normally expect the provider of training services to perform such research on its own account.

Moreover, at Hibernia, traditional safety training is ordinarily not conducted through , but rather uses real equipment and other established methodologies. As the project proposal itself indicates, the

<sup>223</sup> For instance, Hibernia already has

rigorous emergency escape route training in place on the rig in the form of a weekly "muster." The muster is a lot like a fire drill. On hearing the alarm, each worker on the rig must follow the assigned emergency routes to make their way to a lifeboat. This is the type of training that is provided in the ordinary course of business. Training by the second second

," Annex A, § A.3 (May 20, 2014).

<sup>223</sup> *Id.* at p. A-1.

<sup>&</sup>lt;sup>222</sup> C-221, Contribution Agreement Regarding the Project "

• See also CW-7, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a study evaluating the prospects of using to train offshore workers in emergency response. The Claimant alleges that this expenditure is compensable because HMDC would not ordinarily fund research into training alternatives but rather the provider of training services would be expected to perform such research on its own account.<sup>224</sup> The documents, however, show that it was necessary for HMDC to determine whether

The Claimant has thus failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>226</sup> In relation to still another JIP, the Mobil I Majority further recognized that not all safety-related expenditures would have been undertaken even in the absence of the Guidelines.<sup>227</sup>

<sup>226</sup> **C-2**, Mobil I Award ¶ 67.

<sup>227</sup> *Id.* ¶ 76-78.

<sup>&</sup>lt;sup>224</sup> **CW-7**, Durdle Statement I ¶ 37.

<sup>&</sup>lt;sup>225</sup> **R-96**, Letter from **1999**, PRNL to Rod Hutchings, HMDC with attachments (Feb. 27, 2015), Attachment B, p. 23 (p. MICI 0004890).

In addition, PRNL's involvement in organizing this JIP<sup>228</sup> further supports the incremental nature of this expenditure. As Mr. Durdle observed in his first witness statement, "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>229</sup> Mr. Durdle's further observations about this expenditure in his second witness statement, copied below, reinforce the conclusion that HMDC would not have funded this JIP in the ordinary course of business.

### CW-12, Durdle Statement II ¶23

The aim of this JIP is to evaluate the effectiveness of

. Canada, quoting from a document describing this expenditure, argues that "it was necessary for HMDC to determine whether

I believe Canada has not accurately represented this document, which simply describes the project's background and nature. Evaluating the efficacy of training by was in no sense necessary for safety at the Hibernia project. As I explained in my first witness statement, Hibernia personnel are ordinarily trained by using real equipment and other established methodologies.<sup>232</sup> HMDC has not trained personnel stationed on the platform any differently as a result of this study. Moreover, we would expect the provider of training services to perform research on its own account into the efficacy of its services.<sup>233</sup>

<sup>233</sup> *Id.* at ¶ 37.

<sup>&</sup>lt;sup>228</sup> C-239, PRNL, Contribution Agreement regarding the Project "Dynamic Positioning in Ice Environments" dated January 14, 2013.

<sup>&</sup>lt;sup>229</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>&</sup>lt;sup>230</sup> **CW-7**, Durdle Statement I  $\P$  36.

<sup>&</sup>lt;sup>231</sup> Counter Memorial Appendix A, at A-20 (quoting **R-96**, Letter from **Beneficity**, PRNL to Rod Hutchings, HMDC with attachments (Feb. 27, 2015), Attachment B, p. 23 (p. MICI 0004890)).

<sup>&</sup>lt;sup>232</sup> **CW-7**, Durdle Statement I  $\P$  38.

### 17. Enhanced Field School Program (\$420,000)

### A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 89-90

MUN's Earth Science Department organizes a field training program for undergraduate students to visit and to study destinations with geological significance in other Canadian provinces and internationally.<sup>234</sup> At MUN's request, HMDC began funding the field training program in the early part of 2012.<sup>235</sup> In the Mobil I arbitration, Canada did not contest that this was an incremental expenditure, and the tribunal awarded damages on it.<sup>236</sup>

In the remainder of 2012, HMDC made a further contribution of \$420,000 to fund the addition of another field course to the curriculum.<sup>237</sup> As with the initial contribution, this one would not have been made in the absence of the Guidelines. While the field training program may enrich the experience of the undergraduate students who participate in it, HMDC derives no benefit from the contribution.

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a contribution to Memorial University's Department of Earth Sciences in support of field training of students. The Claimant alleges that this expenditure is compensable because HMDC would not have made this community contribution in the absence of the Guidelines.<sup>238</sup> The documents, however, show that this expenditure was motivated by the fact that it would .<sup>239</sup> It was planned for Hibernia

<sup>234</sup> **C-268**, Hibernia MUN Enhanced Field School Program R&D Work Expenditure Application Form (June 5, 2012).

<sup>235</sup> **C-269**, Letter from **Control**, HMDC, to J. Bugden, CNLOPB (June 26, 2012), *attaching* Hibernia Project R&D / E&T Expenditure Submission for Q1 2012, Appendix B.

<sup>236</sup> **C-2**, Mobil I Award ¶ 128.

<sup>237</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B.

<sup>238</sup> **CW-3**, Sampath Statement I  $\P$  81.

<sup>239</sup> **R-117**, EMC R&D Screening Committee Presentation (May 3, 2012), slide 13 (p. MICI 0004689).

employees to participate in the field school trips with Memorial students.<sup>240</sup> HMDC valued receipt of positive recognition for this contribution and

HMDC then went further and released a press release and received press coverage and public gratitude from the University President for this expenditure.<sup>242</sup> Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that the full extent of this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

The incremental nature of HMDC's contribution to MUN's field training program is *res judicata* and cannot be questioned in this proceeding. In the Mobil I Arbitration, Canada accepted that Mobil "provided sufficient evidence" that this community contribution was incremental.<sup>243</sup> The Mobil I Majority decided that MUN's field training program was an incremental expenditure based on Canada's acceptance.<sup>244</sup> Canada does not address its prior acceptance, much less does it dispute the Mobil I Majority's final disposition on the incremental nature of the MUN field school program.

<sup>243</sup> C-389, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Canada's Rejoinder on Damages (January 25, 2013, at ¶ 123 n.267. See also C-390, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Second Post-Hearing Report of Richard E. Walck (January 25, 2013), Annex I, at p. 7.

<sup>&</sup>lt;sup>240</sup> **R-126**, Hibernia News Release, "Hibernia enhancing geosciences field school program at Memorial University" (May 16, 2013). Available at: <u>http://www.hibernia.ca/news/geosciences\_hibernia.pdf.</u>

<sup>&</sup>lt;sup>241</sup> **R-127**, Letter of Agreement between HMDC and Memorial University of Newfoundland for The Hibernia Project Geosciences Field School Support Fund (Oct. 9, 2012), p. MICI 0002264.

<sup>&</sup>lt;sup>242</sup> R-126, Hibernia News Release, "Hibernia enhancing geosciences field school program at University" 2013). Available Memorial (May 16, at: http://www.hibernia.ca/news/geosciences\_hibernia.pdf; R-128, Gazette News Article, "Hibernia geosciences field school program" enhancing (Jun. 5. 2013). Available at: https://www.mun.ca/gazette/issues/vol4515\_Gazette\_June5-online.pdf.

<sup>&</sup>lt;sup>244</sup> **C-2**, Mobil I Award ¶¶ 128-129 & n. 162.

While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-10, Sampath Statement II ¶ 105

This contribution by HMDC was not motivated by advantage were advantage were gained, there is no reason why Mobil or its affiliates would be better positioned than any of the Hibernia owners or other companies, including those from other industries, to receive that advantage.<sup>246</sup> The potential for "positive recognition" would likewise not have justified this expenditure in the ordinary course of business, for the reasons stated at paragraphs 39 through 42 of this statement.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>&</sup>lt;sup>245</sup> Counter Memorial Appendix A, at A-20.

<sup>&</sup>lt;sup>246</sup> See also **CW-3**, Sampath Statement I, at ¶¶ 83-84.

#### 18. Enhanced Iceberg and Sea Ice Drift Forecasting (

#### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 32-33

The purpose of this JIP was to investigate whether improvements in iceberg and sea ice forecasting models have the potential to impact operational decisions and resource planning.<sup>247</sup> In 2012, HMDC for Hibernia contributed (after April 30 of that year)<sup>248</sup> and Suncor for Terra Nova contributed (after fund this JIP. I understand that the operators of White Rose and Hebron projects made contributions, as well.<sup>250</sup>

Notably, it appears that this project was conceived during the Ice Management Joint Industry Project in 2011.<sup>251</sup> I understand this JIP was devised during a workshop held to help the industry brainstorm spending opportunities that would satisfy the requirements of the Guidelines. If the participating projects needed improved forecasting models for successful operations, they would have done so long before.

• See also CW-5, Noseworthy Statement I ¶¶ 26-28 (recounting that the Ice Management JIP workshops were conceived to help local industry achieve the spending requirements under the Guidelines, and therefore "expenditures associated with Ice Management JIPs would not have been incurred by the Hibernia and Terra Nova projects but for the Guidelines")

<sup>&</sup>lt;sup>247</sup> **C-233**, PRNL, Contribution Agreement regarding the Project "Enhanced Iceberg and Sea Ice Drift Forecasting" dated March 2, 2012, Annex B.

<sup>&</sup>lt;sup>248</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>249</sup> **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix F.

<sup>&</sup>lt;sup>250</sup> **C-233**, PRNL, Contribution Agreement regarding the Project "Enhanced Iceberg and Sea Ice Drift Forecasting" dated March 2, 2012.

<sup>&</sup>lt;sup>251</sup> C-234, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (undated), at pp. 10-11.

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a joint-industry project to determine if enhancements in existing iceberg and sea ice forecasting models can have a real impact on operational decision-making and resource-planning. The Claimant alleges that this expenditure is compensable because if such forecasting models were needed, the operators would have gotten them long before and there was no need for the program at Hibernia or Terra Nova.<sup>252</sup> The documents, however, state that "[f]orecasting iceberg and sea ice movements is critical input in any ice management system", and

#### <sup>253</sup> Documents further note that

Project drivers for this

#### research include

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Specifically, it Canadian taxpayers should not

be required to pay the Claimant for research which, by its own admission, is essential for it to make informed and well-based decisions in its operations. The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken" and for "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported", <sup>257</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research" and undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of even low-lying

<sup>252</sup> **CW-3**, Sampath Statement I  $\P$  33.

<sup>253</sup> **C-233**, PRNL, Contribution Agreement for "Enhanced Iceberg and Sea Ice Drift Forecasting" (Mar. 2, 2012), p. B-1 (p. MOB0004508).

<sup>254</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002766.

<sup>255</sup> **R-125**, Letter from **Contraction**, HMDC to Jeff Bugden, CNLOPB attaching Ice Management Program R&D Work Expenditure Application Form (Dec. 15, 2010), p. MICI 0003012

<sup>256</sup> **R-129**, Presentation, Development of Improved Ice Management Capabilities for Operations in Ice Environments (Dec. 15, 2010), p. MICI 0003133.

<sup>257</sup> **C-37**, Hibernia Decision 86.01, p. 82.

masses of floating ice."<sup>258</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

As Mr. Sampath noted in his first witness statement, this JIP was conceived at the Ice Management workshop organized by C-CORE to assist industry in devising expenditures that would satisfy the Guidelines.<sup>259</sup> In relation to the ice management R&D projects devised through this JIP, the Mobil I Majority found that they were "far more extensive than previous work focused on ice management, both in terms of scope and costs."<sup>260</sup> Indeed, the Mobil I Majority held that the costs relating to the workshop itself were incremental.<sup>261</sup> Given that the Enhanced Iceberg and Sea Ice Drift Forecasting project was conceived at the same C-CORE workshop, Canada cannot credibly contest the incremental nature of this expenditure in this proceeding.

Moreover, as the Mobil I Majority recognized, the fact that that an expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>262</sup>

Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's conclusion that ice management projects like this one are incremental.

#### CW-10, Sampath Statement II ¶ 54

As I mentioned in my first witness statement, this JIP was conceived during the Ice Management Joint Industry Project in 2011, whose purpose was to help industry

<sup>&</sup>lt;sup>258</sup> **C-41**, Terra Nova Decision 97.01, pp. 23, 47.

 $<sup>^{259}</sup>$  CW-3, Sampath Statement I  $\P$  33.

<sup>&</sup>lt;sup>260</sup> **C-2**, Mobil I Award ¶ 105.

<sup>&</sup>lt;sup>261</sup> *Id*.

<sup>&</sup>lt;sup>262</sup> *Id.* Mobil I Award  $\P$  67.

brainstorm spending opportunities to satisfy the spending requirements of the Guidelines.<sup>263</sup> The potential benefits of this project would not have motivated either HMDC or Suncor to provide funding, for the reasons discussed at paragraphs 22 to 26 of this statement. Moreover, I disagree with Canada's characterization of this research as "essential"; if it were essential, it would have been accomplished by the time the Hibernia gravity base structure ("GBS") was installed and began operations.

• See also CW-10, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

<sup>&</sup>lt;sup>263</sup> **CW-3**, Sampath Statement I ¶ 33.

#### 19. Enhanced Satellite Radar (

)

### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 30-31

This JIP aims to integrate data collected from satellite radar to monitor icebergs and sea ice in ice-prone regions.<sup>264</sup> The proposed work includes

HMDC contributed in 2012 (after April 30 of that year)<sup>265</sup> and in 2013<sup>266</sup> on behalf of the Hibernia project, while Suncor contributed in 2012<sup>267</sup> and in 2013<sup>268</sup> on behalf of the Terra Nova project. I understand that the White Rose and Hebron operators made contributions, as well.<sup>269</sup> This JIP was unnecessary. The platforms and vessels that serve the projects are already equipped with technologies that detect sea ice and ice bergs. While satellite data may extend the range of detection to far-reaching geographical areas, this extended range is unnecessary for safe and successful project operations.

• See also CW-5, Noseworthy Statement I ¶¶ 26-28 (recounting that the Ice Management JIP workshops were conceived to help local industry achieve the spending requirements under the Guidelines, and therefore "expenditures associated with Ice Management JIPs would not have been incurred by the Hibernia and Terra Nova projects but for the Guidelines")

<sup>&</sup>lt;sup>264</sup> **C-232**, PRAC, Contribution Agreement regarding the Project "Enhanced Satellite Radar-based Iceberg Detection and Sea Ice Monitoring" dated January 24, 2012, Annex B.

<sup>&</sup>lt;sup>265</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>266</sup> **C-212**, Hibernia 2013 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>267</sup> C-207, Terra Nova 2012 Board R&D Decisions, Appendix F.

<sup>&</sup>lt;sup>268</sup> C-230, Terra Nova 2013 Board R&D Decisions, Appendix F.

<sup>&</sup>lt;sup>269</sup> **C-232**, PRAC, Contribution Agreement regarding the Project "Enhanced Satellite Radar-based Iceberg Detection and Sea Ice Monitoring" dated January 24, 2012.

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a multi-year research program to enhance the use of satellite radar for sea ice and iceberg monitoring and integrate satellite-derived data into existing operations. The Claimant alleges that this expenditure is compensable because the platforms and vessels that serve the projects are already equipped with iceberg/sea ice detection technologies.<sup>270</sup> The documents, however, state that "

; and
Further, there is a gap in existing technology as
The research i
necessary for
It is relevant to
. Canadian taxpayers should not be required to compensate th
Claimant for the acquisition of knowledge that Claimant can apply to its futur
arctic offshore operations, which by its own admission is
. <sup>276</sup> The Claimant has a long-standing commitment in th
Hibernia Benefits Plan for "research and development to improve the ability to
detect and manage ice under adverse weather conditions [to] be undertaken", <sup>27</sup>

<sup>270</sup> **CW-3**, Sampath Statement I ¶ 33.

<sup>271</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002723.

<sup>272</sup> *Ibid*.

<sup>273</sup> **R-96**, Letter from **PRNL** to Rod Hutchings, HMDC with attachments (Feb. 27, 2015), p. MICI 0004870.

<sup>274</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002763.

<sup>275</sup> **R-129**, Presentation, Development of Improved Ice Management Capabilities for Operations in Ice Environments (Dec. 15, 2010), p. MICI 0003131.

<sup>276</sup> **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003215.

<sup>277</sup> **C-37**, Hibernia Decision 86.01, p. 82.

and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research" and undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of even low-lying masses of floating ice.".<sup>278</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>279</sup>

In addition, the involvement of PRNL's predecessor, PRAC, in organizing this JIP<sup>280</sup> further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>281</sup>

Mr. Sampath's further observations about this expenditure, copied below, reinforce the conclusion that the Hibernia and Terra Nova operators would not have funded this JIP in the ordinary course of business.

<sup>281</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>&</sup>lt;sup>278</sup> **C-41**, Terra Nova Decision 97.01, pp. 23, 47.

<sup>&</sup>lt;sup>279</sup> **C-2**, Mobil I Award ¶ 67.

<sup>&</sup>lt;sup>280</sup> C-232, PRAC, Contribution Agreement regarding the Project "Enhanced Satellite Radar-based Iceberg Detection and Sea Ice Monitoring" dated January 24, 2012.

#### CW-10, Sampath Statement II ¶¶ 52-53

The goal of this JIP was to integrate satellite radar data into programs to monitor icebergs and sea ice in ice-prone regions.<sup>282</sup> I note that this was one of the items considered and evaluated at a PRAC workshop to identify projects that local industry could jointly fund to help meet the Guidelines' spending requirements.<sup>283</sup> Moreover, the knowledge and technology developed through this JIP would not be proprietary, which is another reason why HMDC and Suncor would not have funded this in the Guidelines' absence, as I explain at paragraphs 27 to 31 of this statement.

I personally attended the final presentation of the findings of this project. After this presentation, I do not believe the results of the project have been applied by any operator or Mobil affiliate.

- See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)
- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>&</sup>lt;sup>282</sup> **C-232**, PRAC, Contribution Agreement regarding the Project "Enhanced Satellite Radar-based Iceberg Detection and Sea Ice Monitoring" dated January 24, 2012, Annex B.

<sup>&</sup>lt;sup>283</sup> C-364, PRAC, Ice Management Program SME Workshop August 17, 2011 (Undated), at pp. 3-4.

### 20. Enhancing the Operability of Offshore Personnel Transfer (

)

#### A. First Witness Statement(s)

#### CW-7, Durdle Statement I ¶¶ 18-19

This JIP was administered by PRNL. It aimed to improve the performance, efficiency, and safety of personnel transfer processes between marine-based transport systems and offshore structures through enhancements to existing transfer systems and development of new concepts.<sup>284</sup>

While transportation of personnel to the offshore platform is an important aspect of our operations, transportation vessels and helicopters already exist for that purpose. Over the years, tens of thousands of people have been successfully and safely moved by vessel and helicopters to the facilities offshore Newfoundland. These existing means of transport are satisfactory, and no perceived weaknesses in them might have prompted us to fix this. The oil industry does not ordinarily set up a project where the sole purpose is to come up with new studies without any defined parameters or specifications. I can see no reason, apart from the Guidelines, for Hibernia and Terra Nova's decision to fund this study. Hibernia and Terra Nova have functioning transportation vessels in place, and this study does not seek to respond to any issues arising out of use of those vessels.

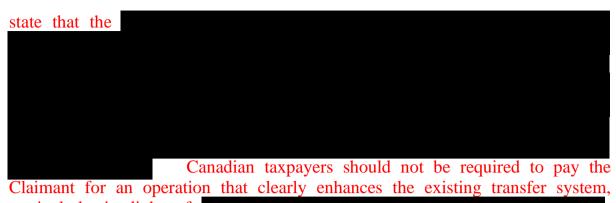
• See also CW-7, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a multi-phase project intended to improve the performance, efficiency, and safety of personnel transfer processes between marine transport systems and offshore structures. The Claimant alleges that this expenditure is compensable because there already existed satisfactory means of transferring personnel to the platforms.<sup>285</sup> The documents, however,

<sup>&</sup>lt;sup>284</sup> **C-208**, Letter from **Control**, HMDC, to J. Bugden, CNLOPB, *attaching* R&D Work Expenditure Application for JIP related to Enhancing the Operability of Offshore Personnel Transfer – Phase I (Nov. 21, 2012).

<sup>&</sup>lt;sup>285</sup> **CW-7**, Durdle Statement I ¶ 19.



particularly in light of The Claimant has a long-standing commitment in the Hibernia 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", <sup>287</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". <sup>288</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>289</sup> In relation to still another JIP, the Mobil I Majority further recognized that not all safety-related expenditures would have been undertaken even in the absence of the Guidelines.<sup>290</sup>

<sup>&</sup>lt;sup>286</sup> R-130, Presentation: Offshore Marine Transportation and Transfer Optimization (Undated), p. MICI 0002271.

<sup>&</sup>lt;sup>287</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>288</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

<sup>&</sup>lt;sup>289</sup> **C-2**, Mobil I Award ¶ 67.

<sup>&</sup>lt;sup>290</sup> Id. ¶ 76-78.

In addition, PRNL's involvement in organizing this JIP<sup>291</sup> further supports the incremental nature of this expenditure. As Mr. Durdle observed in his first witness statement, "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>292</sup> Mr. Durdle's further observations about this expenditure in his second witness statement, copied below, reinforce the conclusion that HMDC would not have funded this JIP in the ordinary course of business.

#### CW-12, Durdle Statement II ¶¶ 6 - 8

This joint industry project ("JIP") aimed at developing new concepts for improved shore-to-platform transport systems for personnel.<sup>293</sup> There was no need to develop new concepts, as existing means of transport have been in place for many years and have proved satisfactory.<sup>294</sup> Moreover, if there was any need to develop new concepts, I am confident that the initiative would not have been undertaken as a JIP among the several operators in the Jean D'Arc Basin. Each operator would want a study of alternative concepts to be tailored to the unique challenges associated with the platform it actually operates. The Hibernia project is operated from a gravity base structure, while the Terra Nova project is operated from a floating production, storage, and offloading vessel ("FPSO"). Owing to fundamental differences between these types of platforms, HMDC and Suncor Energy Inc. ("Suncor") would not have likely collaborated in an effort to come up with new personnel transfer concepts that might well be incompatible with the platform type operated by either of them.

Canada references a presentation which discusses .<sup>295</sup> Canada appears to imply that in light of , the Hibernia and Terra Nova operators would have funded this JIP even

<sup>294</sup> *Id.* ¶ 19.

<sup>&</sup>lt;sup>291</sup> C-239, PRNL, Contribution Agreement regarding the Project "Dynamic Positioning in Ice Environments" dated January 14, 2013.

 $<sup>^{292}</sup>$  CW-7, Durdle Statement I  $\P$  17.

<sup>&</sup>lt;sup>293</sup> **CW-7**, Durdle Statement I ¶ 18.

<sup>&</sup>lt;sup>295</sup> Counter Memorial Appendix A, at A-24 to A-25 (citing **R-130**, Presentation: Offshore Marine Transportation and Transfer Optimization (Undated), p. MICI 0002271).

in the absence of the Guidelines. <sup>296</sup> In actual fact, the presentation referenced by
Canada cites " <sup>"297</sup> ;
, which is unaffiliated with the Hibernia and Terra Nova projects and in
which Mobil does not have any interest. Conversely, I am not aware of any
preceding the start of this JIP. If there was any , that
would tend to show that the personnel transfer systems in place are safe and

satisfactory.

Canada also claims that this project "clearly enhances the existing transfer system" for the projects offshore Newfoundland.<sup>298</sup> I disagree, as the personnel transfer systems at Hibernia and Terra Nova were not altered, much less "enhance[d]", as a result of this JIP. Also, as I noted in my first witness statement, "Hibernia and Terra Nova have functioning transportation vessels in place, and this study does not seek to respond to any issues arising out of use of those vessels."<sup>299</sup> Leading up to this JIP, the incidence of personal injury associated with the marine personnel transfer systems at the Hibernia project was low, and there was no loss of life. I am not aware of any such issues with the Terra Nova project, either. With the risk to personal safety being as low as reasonably practicable, the industry's "ALARP" standard for safety was met, thereby making this JIP unnecessary.<sup>300</sup>

<sup>&</sup>lt;sup>296</sup> *Id.* at A-25.

<sup>&</sup>lt;sup>297</sup> **R-130**, Presentation: Offshore Marine Transportation and Transfer Optimization (Undated), p. MICI 0002271.

<sup>&</sup>lt;sup>298</sup> Counter Memorial Appendix A, at A-25.

<sup>&</sup>lt;sup>299</sup> **CW-7**, Durdle Statement I ¶ 19.

<sup>&</sup>lt;sup>300</sup> *Id.* ¶ 14.

#### 21. Environmental Genomics (

)

#### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 79-80

The purpose of this project is to establish a Center for Environmental Genomics to serve as a local hub for assessment studies that apply environmental genomics.<sup>301</sup> Essentially, environmental genomics assessments involve collecting samples of water or sediment, identifying traces of DNA, and using that information to identify the species present in those samples. The biggest cost of this project is the .<sup>302</sup> In 2015, HMDC incurred in costs associated with this initiative, including the costs of .<sup>303</sup>

Hibernia already manages an Environmental Effects Monitoring program that utilizes conventional techniques to regularly assess marine life around Hibernia facilities. In theory, genomics-based methods could one day replace or improve upon the existing environmental assessment and monitoring tools, but that possibility would not have justified spending Hibernia project funds on setting up the center. If not for the need to satisfy the requirements of the Guidelines, HMDC—as operator of the Hibernia project—would not spend project funds in this way.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to the development of a center for environmental genomics that will be a hub for environmental assessment studies. The Claimant

<sup>&</sup>lt;sup>301</sup> C-265, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB (May 14, 2014), *attaching* R&D Work Expenditure Application for "Centre for Environmental Genomics-Phase 1" project.

<sup>&</sup>lt;sup>302</sup> *Id.*, Hibernia R&D Project Abstract, at p. 1.

<sup>&</sup>lt;sup>303</sup> **C-216**, Draft Hibernia May-December 2015 R&D and E&T Expenditures.

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alleges this expenditure is compensable because Hibernia already uses conventional techniques to assess marine life and would not have spent funds to set up a centre to research genomics-based methods to do so. <sup>304</sup> The documents,
however, show that and that the
research is important to ExxonMobil's worldwide operations. In fact, prior to the
expenditure application to the Board,
, <sup>305</sup> and this project is described by ExxonMobil as area of
306 •
The establishment of the center was to
<sup>307</sup> The project deliverable confirms that data was to be
generated for <sup>308</sup>
. <sup>309</sup> It is also envisioned that the services provided by the
Center
. <sup>310</sup> Documents also confirm that the "Project
Driver" was an

<sup>304</sup> **CW-3**, Sampath Statement I ¶ 80.

<sup>305</sup> **C-265**, Letter from K. Sampath, HMDC to C. Dyer, CNLOPB attaching Centre for Environmental Genomics – Phase 1 R&D Work Expenditure Application Form (May 14, 2014), p. 3 (p. MOB0005033).

<sup>306</sup> **R-131**, Presentation, Newfoundland and Labrador R&D, Offshore & Environment Function Environmental Technology Section: Opportunities and Initial Impressions (Feb. 7, 2014), p. 2 (p. MICI 0004755).

<sup>307</sup> **C-0265**, Letter from K. Sampath, HMDC to C. Dyer, CNLOPB attaching Centre for Environmental Genomics – Phase 1 R&D Work Expenditure Application Form (May 14, 2014), pp. 1-2 (p. MOB0005031-5032).

<sup>308</sup> *Ibid*, p. 2 (p. MOB0005032).

 $^{309}$  **R-132**, ExxonMobil Presentation, Center for Environmental Genomics – Detailed Proposal (Undated), slide 7

<sup>310</sup> *Ibid*, slide 3.

<sup>311</sup> **R-131**, Presentation, Newfoundland and Labrador R&D, Offshore & Environment Function Environmental Technology Section: Opportunities and Initial Impressions (Feb. 7, 2014), slide 5 (p. MICI 0004758).

and that the

<sup>312</sup> Canadian taxpayers should not be required to pay the Clamant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia 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."<sup>313</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have contributed to the establishment of a Center for Environmental Genomics. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>314</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

CW-10, Sampath Statement II ¶¶ 98-100

As I explained in my first witness statement, HMDC would not have made substantial financial contributions to the setting up of a center to research the as-yet unproven field of environmental genomics.<sup>315</sup> Canada makes a lot of the fact that was had some input into this initiative.<sup>316</sup> But for purposes of determining whether this center would have been funded in the Guidelines' absence, limited involvement is not significant for the reasons that I give at paragraphs 32 through 38 of this statement.

<sup>&</sup>lt;sup>312</sup> **R-133**, Description of Project – A center for environmental genomics (Undated), p. 1 (p. MICI 0005183).

<sup>&</sup>lt;sup>313</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>314</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>315</sup> **CW-3**, Sampath Statement I  $\P$  80.

<sup>&</sup>lt;sup>316</sup> Counter Memorial Appendix A, at A-25 to A-26.

. This is not a correct
The idea is for the center to be
located in

The potential benefits and knowledge that might result from the environmental genomics center would not have justified HMDC's expenditure on this nonessential initiative, for the reasons discussed at paragraphs 22 through 26 of this statement. Moreover, as I explained in my first statement, the Hibernia project already manages an Environmental Effects Monitoring program that is acceptable to regulators.<sup>318</sup> For this additional reason, funding an independent center to research alternative methods of environmental monitoring would not have been on HMDC's agenda in the ordinary course of its business.

- See also CW-10, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)
- See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")

<sup>&</sup>lt;sup>317</sup> *Id.* at A-26 (citing R-132, ExxonMobil Presentation, Center for Environmental Genomics – Detailed Proposal (Undated), slide 7).

<sup>&</sup>lt;sup>318</sup> **CW-3**, Sampath Statement I  $\P$  80.

# 22. Environmental Impact of Seismic Activity on Shrimp Behavior

### A. First Witness Statement(s)

#### CW-8, Dunphy Statement I ¶¶ 15-16

The objective of this project was to study the behavioral effects on Northern Shrimp due to exposure to sound generated by seismic survey activities.<sup>319</sup> It arose because

The concept for this project was originally raised

#### at PRNL's HSE Workshop.

I have no doubt that this PRNL study would not have been funded in the ordinary course of business. Simply put, the projects contributing to this study, including Hibernia and Terra Nova, had nothing to gain by it, nor was this study required by any regulator. Notably, the chief proponents of this study – did not contribute any money to this JIP. Moreover, the study's premise that seismic activities associated with offshore operations could possibly have impacted shrimp catches is farfetched, as shrimping activities occur more than a hundred miles away from where Hibernia and Terra Nova operate.

• See also **CW-7**, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a study intended to determine whether seismic noise can scare shrimp, if so at what distance, and how long it takes to return to the preexposure condition. The Claimant alleges that this expenditure is compensable because the project owners have nothing to gain from it and that the study was not required by any regulator, and the shrimping activities occur more than

<sup>&</sup>lt;sup>319</sup> **C-319**, PRNL Presentation "Seismic Effects on Shrimp and Cod" (undated).

<sup>&</sup>lt;sup>320</sup> **C-316**, HSE Workshop Voting Results: Environmental Projects (undated).

100 miles away from Hibernia and Terra Nova.<sup>321</sup> The documents, however, note that

. Canadian taxpayers should not be required to compensate the Claimant for research intended to generate data and mitigate its corporate liabilities. The Claimant has a long-standing commitment in the Hibernia 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",<sup>323</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research".<sup>324</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>325</sup> The Mobil I Majority's recognition aligns with Mr. Dunphy's testimony from his first witness statement that he has "no doubt that this PRNL study would not have been funded in the ordinary course of business."<sup>326</sup> Indeed, "[t]he concept for this project was originally raised at PRNL's HSE Workshop", the purpose of which was to help local industry devise expenditures that would help satisfy the expenditure obligations of the Guidelines.<sup>327</sup>

<sup>324</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

- <sup>325</sup> **C-2**, Mobil I Award ¶ 67.
- <sup>326</sup> **CW-8**, Dunphy Statement I  $\P$  16.

<sup>327</sup> *Id.* ¶¶ 14-15.

<sup>&</sup>lt;sup>321</sup> **CW-8**, Dunphy Statement I ¶ 16.

<sup>&</sup>lt;sup>322</sup> C-319, PRNL Presentation "Seismic Effects on Shrimp and Cod" (Undated), p. MOB0005727.

<sup>&</sup>lt;sup>323</sup> **C-37**, Hibernia Decision 86.01, p. 25.

In addition, Mr. Dunphy's further comments in his second witness statement, copied below, reinforce the conclusion that this JIP was not undertaken in the ordinary course of Hibernia's and Terra Nova's business.

#### CW-13, Dunphy Statement II ¶¶ 3-6

The purpose of this study was to investigate the behavioral effects of Northern Shrimp due to exposure to sound generated by seismic survey activities.<sup>328</sup> Canada cites a Petroleum Research Newfoundland and Labrador ("PRNL") document which reflects that

.<sup>329</sup> This document does not contradict anything I said in my first witness statement. In fact, in my first witness statement, I referenced this same document in noting that

<sup>330</sup> That would not, in itself,

motivate the Hibernia and Terra Nova operators to commit project account funds to this study.

Citing this same PRNL document, Canada states that

<sup>331</sup> Canada appears to imply that this circumstance in itself caused the Hibernia and Terra Nova projects to fund the shrimp behavior study. If this is what Canada means to say, I do not agree. As I said before, it is farfetched to think that the seismic activities associated with offshore drilling and production operations in the Jean D'Arc Basin could possibly have impacted shrimp catches.<sup>332</sup> did not contribute any of its own money to fund this study.<sup>533</sup> The areas of shrimp harvesting activity are located far away, approximately 100

 $^{328}$  *Id.* ¶ 15.

<sup>329</sup> Counter Memorial Appendix A, at A-27 (citing **C-319**, PRNL Presentation "Seismic Effects on Shrimp and Cod" (Undated), p. MOB0005727).

<sup>330</sup> **CW-8**, Dunphy Statement I ¶ 15 & n. 10.

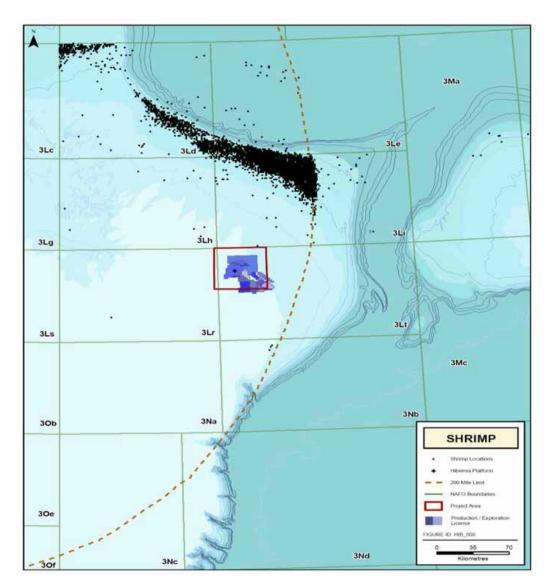
<sup>331</sup> Counter Memorial Appendix A, at A-27 (citing **C-319**, PRNL Presentation "Seismic Effects on Shrimp and Cod" (Undated), p. MOB0005727).

<sup>332</sup> **CW-8**, Dunphy Statement I  $\P$  16.

<sup>333</sup> *Id*.

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kilometers,<sup>334</sup> from the Hibernia platform and the Terra Nova floating production, storage and offloading vessel ("FPSO"), as illustrated in the map below:



# **Northern Shrimp Harvesting Locations**<sup>335</sup>

 $<sup>^{334}</sup>$  *Id.* In my first witness statement, where it reads "a hundred miles away" it should instead have read "a hundred kilometers away."

<sup>&</sup>lt;sup>335</sup> **C-356**, Jacques Whitford Limited, Screening Report – Hibernia Drill Centres Construction and Operations Program Hibernia Management and Development Company (HMDC) (July 24, 2009), at p. 94, fig. 4.10, "Northern Shrimp Harvesting Locations 2005, 2006 and 2007".

For orientation to the above map, the Hibernia platform is in the red box and represented by a black cross. The Terra Nova FPSO, though not represented in this particular map, is also located in the red box. As can be seen from the map, the main area of shrimp harvesting occurs more than 100 kilometers away.

Canada also appears to argue that this research could help mitigate undefined "corporate liabilities."<sup>336</sup> I am not sure what potential liabilities Canada may be referring to. For completeness of information, I note that each offshore project in the Jean D'Arc Basin, including the Hibernia and Terra Nova projects, has a Fisheries Compensation Program (the "Programs").<sup>337</sup> The Programs establish a voluntary process outside of the formal legal system which facilitates communication between fishermen and the oil field operators.<sup>338</sup> Through this voluntary process, fishermen can present claims directly to the Operator for defined types of losses they may allege are due to oil field operations—such as reduced or impacted harvests or lost equipment. I am not aware of any actual or threatened claims under the Programs based on a theory that seismic activities are affecting shrimp or fish catches. In fact, fishermen claims under the Programs are rare,

In the end, no knowledge about the potential impact of seismic activity on shrimp was generated as a result of the operators' contributions to the project to date. The bottom line is that in the absence of the Guidelines, no phase of this joint industry project ("JIP") would have been funded by HMDC for Hibernia or Suncor Energy Inc. ("Suncor") for Terra Nova.

<sup>336</sup> Counter Memorial Appendix A, at A-27.

<sup>338</sup> *Id.* at pp. 7-14.

<sup>&</sup>lt;sup>337</sup> See, for example, **C-357**, Hibernia Management and Development Company, Ltd & Fisheries Code of Practice, Rev. 0 (May 29, 2000).

)

#### 23.Escape-Evacuation-Rescue (EER) in Ice JIP (

#### A. First Witness Statement(s)

#### CW-7, Durdle Statement I ¶¶ 20-22

This joint industry project originated with Terra Nova, which proposed to move forward with it as a JIP administered through PRNL. The JIP's ultimate objective is to develop a commercially available, next generation Escape-Evacuation-Rescue ("EER") system for ice-covered regions.F<sup>339</sup> In short, it provides for the development and commercial production of evacuation craft, such as lifeboats, that can operate in marine and sea ice conditions.<sup>340</sup> When this JIP was first proposed, no detailed specifications existed.

	The goal	of Phase 2,	whose e	expenditures I	understand	are at
issue in this	arbitration, is					
					341	Such

craft are unnecessary to operations at Hibernia.

Needless to say, Hibernia already has lifeboats in place, which meet all of the standards established under the SOLAS (Safety of Life at Sea) Convention, the international treaty that regulates lifeboat standards on a global basis. In fact, HMDC recently replaced the lifeboats on the Hibernia platform following standard procurement practices—that is, HMDC undertook a standard commercial evaluation of the available technology, requested that the manufacturer make a few adaptations to the design to make the lifeboats suitable to the North Atlantic environment, and then purchased and installed these lifeboats. As a result of the replacement, Hibernia now counts on eight new lifeboats designed for the North Atlantic environment. None of the costs associated with this purchase have been claimed as an incremental expenditure in either the prior or current NAFTA arbitration; in fact, we did not even claim to the Board that it was an R&D expenditure under the Guidelines. In light of these circumstances, it simply does

<sup>339</sup> C-209, \_\_\_\_\_\_, Next Generation EER System for Ice Covered Regions at 1-2 (June 17, 2009).

<sup>340</sup> *Id*.

<sup>&</sup>lt;sup>341</sup> **C-210**, Contribution Agreement Regarding The Project "Next Generation Cold Regions Escape-Evacuation-Rescue (EER) System - Phase II-Concept Design," Annex B, § 1.1 (Nov. 25, 2011).

not make commercial sense for us to be financially supporting a R&D project aimed at designing entirely new lifeboats, absent the Guidelines, particularly given that around the same time we were spending considerable funds on obtaining replacement lifeboats. Especially, when you consider that any new lifeboat design arising from this work would be available to and of benefit to the entire industry, not just our operation, it would not make sense for our management to fund such a wide-ranging project.

In any event, it is very unlikely that the boats envisioned by this JIP would ever be required at Hibernia. Their use would only be required if Hibernia's Gravity Base Structure ("GBS") were completely surrounded by ice. This has never happened in the history of Hibernia. In the unlikely event that ice ever did surround the GBS, the workforce is able to be evacuated by helicopter and stand-by vessels, production would be shut in, and we would simply wait out the ice before returning personnel to the GBS and resuming operations. I believe the same is true for Terra Nova. In particular, because Terra Nova operates from a Floating Production, Storage, and Offloading vessel, if it was confronted with an ice pack, it could simply shut down production and move to a safe area. In sum, Hibernia and Terra Nova already have state-of-the-art safety procedures in place for handling dangers posed by ice. In my opinion, this JIP is an unnecessary addition that, in considering the time to bring such innovations to the operational stage and in considering the economic life of our field, is unlikely to be employed at the projects. This JIP, in other words, looks to mitigate a risk that either does not really exist at Hibernia or Terra Nova or, if it did materialize, could be mitigated by other means.

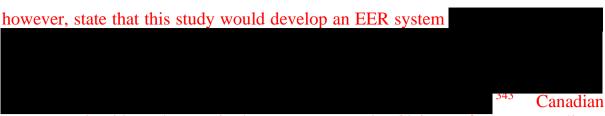
• See also CW-7, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements").

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a multi-phase project aimed at developing a commercially available, next-generation Escape-Evacuation-Rescue (EER) system for ice-covered regions. The Claimant alleges that this expenditure is compensable because it was "unnecessary to operations at Hibernia." <sup>342</sup> The documents,

<sup>&</sup>lt;sup>342</sup> **CW-7**, Durdle Statement I  $\P$  20.

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taxpayers should not be required to compensate the Claimant for an expenditure that will be relevant and beneficial to the Claimant in its future arctic and subarctic operations.<sup>344</sup> The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions be undertaken",<sup>345</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research".<sup>346</sup> The Claimant has failed to prove with reasonable certainty that it should be compensated for the full extent of this expenditure.

#### C. Mobil's Response And Further Witness Testimony

The incremental nature of the EER project is *res judicata* and cannot be questioned in this proceeding. The Mobil I Majority held as follows:

The Claimants' witness, Mr. Durdle, convincingly describes how various aspects of this project are above and beyond standard requirements. For example, part of the project is aimed at the development of more advanced lifeboats. At Hibernia, at the same time as the development of these *advanced* lifeboats is proceeding, the regular lifeboats are being replaced with the same type of regular lifeboat. This seems highly suggestive of the exceptional nature of the spending on advanced lifeboats. Mr. Durdle also convincingly described how the escape evacuation equipment may not even ultimately be appropriate for use at either Hibernia or Terra Nova, which further supports the non-ordinary course nature of this project.

<sup>343</sup> **C-209**, **C-209**, Next Generation EER System for Ice Covered Regions (Jun. 17, 2009), p. 2 (p. MOB0003575).

<sup>344</sup> **R-134**, Letter from **PRNL** to Rod Hutchings, HMDC with attachments (Mar. 4, 2013), p. MICI 0004833.

<sup>345</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>346</sup> C-41, Terra Nova Decision 97.01, p. 23.

By contrast, the Respondent merely challenges statements by the Claimants and their witness, rather than offering any evidential basis to refute the Claimants' assertion. The Respondent has failed to show that this project was necessary for safety and/or in the ordinary course.

For the foregoing reasons, the Majority finds that the Claimants have proven that this expenditure is incremental.<sup>347</sup>

Canada does not address, much less dispute, the Mobil I Majority's final disposition on the incremental nature of the EER project. While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Durdle's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-12, Durdle Statement II ¶¶ 9-11

This JIP concerns the development and commercial production of Escape-Evacuation-Rescue ("EER") craft, such as lifeboats, for ice-covered waters.<sup>348</sup> As I explained in my first witness statement, it would not make sense for the Hibernia and Terra Nova operators to fund this project except in the context of meeting their spending obligations under the Guidelines.<sup>349</sup> HMDC had recently replaced the lifeboats on the Hibernia platform. Given the uncertainty and the protracted amount of time it would take to bring a new lifeboat from initial concept to design phase and then to actual certification for use in the field, it is unlikely that the alterative designs contemplated by this JIP would ever be procured for or used at the Hibernia or Terra Nova projects.<sup>350</sup>

Canada references a document that explains the potential applications of new EER systems; the document claims

.<sup>351</sup> I point out that this document is a proposal authored

 $^{348}$  Id. ¶ 20.

<sup>349</sup> *Id.* ¶¶ 21-22.

<sup>350</sup> *Id*.

<sup>351</sup> Counter Memorial Appendix A, at A-28 (citing **C-209**, **Constant of Constant of Const** 

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<sup>&</sup>lt;sup>347</sup> C-2, Mobil I Award ¶¶ 82-84 (footnotes omitted).

by the service provider, who is the ultimate recipient of the financial contributions to this JIP. The technology under development will likely never be used at the Hibernia or Terra Nova projects, for the reasons I set out in my first witness statement.<sup>352</sup> From the perspective of the Hibernia and Terra Nova projects' owners, there is clearly no for funding this JIP. This project funnels their financial resources to to develop its own proprietary technology.<sup>353</sup> This arrangement is not something that the owners of the Hibernia and Terra Nova projects would ordinarily agree to.

Canada also claims that this JIP "will be relevant and beneficial" to "future arctic and sub-arctic operations."<sup>354</sup> But this JIP is unlikely to yield any benefit for the Hibernia or Terra Nova projects, and HMDC and Suncor would not have funded it in the ordinary course of their business. As operators, HMDC and Suncor are focused on the Hibernia and Terra Nova projects which they respectively operate. This JIP's potential relevance to future operations at projects elsewhere would not have justified HMDC or Suncor committing project account funds to support it.

<sup>&</sup>lt;sup>352</sup> **CW-7**, Durdle Statement I ¶ 21-22.

<sup>&</sup>lt;sup>353</sup> C-210, Contribution Agreement Regarding The Project "Next Generation Cold Regions Escape-Evacuation-Rescue (EER) System - Phase II-Concept Design," § 6.2 (Nov. 25, 2011), at p. MOB0003590.

<sup>&</sup>lt;sup>354</sup> Counter Memorial Appendix A, at A-28.

#### 24.ESTEEM Girls (\$100,000)

### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 154-155

ESTEEM (Educational Science, Trades, Engineering, Exploration and Mentoring) Women is a not-for-profit organization that encourages girls to pursue careers in science, trades and technology.<sup>355</sup> ESTEEM Women asked HMDC to fund the GO SETT (Girls Interested in Operations, Science, Engineering, Trades and Technology) pilot program to introduce girls at a local high school to careers in these areas.

HMDC gave \$100,000 to ESTEEM Women to fund the GO SETT pilot program in 2014.<sup>356</sup> The program's young participants do not necessarily end up pursuing careers in the fields introduced through the program, much less careers in the offshore oil and gas industry. In the absence of the Guidelines, HMDC would not have made this contribution.

#### **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that this expenditure is compensable because HMDC would not have made this "community contribution" in the absence of the Guidelines.<sup>357</sup> The documents, however, show that HMDC valued receipt of positive recognition for this contribution and

and that "HMDC is proud to be associated with ESTEEM Women".<sup>359</sup> Canadian taxpayers should not be required to

<sup>356</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix B.

<sup>357</sup> **CW-3**, Sampath Statement I ¶ 133.

<sup>358</sup> **R-135**, Letter of Agreement between HMDC and ESTEEM Women for ESTEEM GO SETT Program (Feb. 28, 2014), p. MICI 0002584.

<sup>359</sup> Ibid.

<sup>&</sup>lt;sup>355</sup> **C-314**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (February 25, 2014), *attaching* ESTEEM Girls Interested in Science, Engineering, Trades and Technology Program R&D Work Expenditure Application Form.

compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full extent of this expenditure.

#### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have provided a community contribution of \$100,000 to ESTEEM. Before the enforcement of the Guidelines, HMDC did not make community contributions of this magnitude. Indeed, in the Mobil I Arbitration, Canada did not even challenge the vast majority of the community contributions, which the Mobil I Majority awarded.<sup>360</sup> Mr. Sampath's additional testimony in his second witness statement only reinforces the conclusion that this \$100,000 community contribution—in addition to the millions of dollars in other community contributions claimed in this proceeding—is incremental.

#### CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

••••

• ESTEEM Girls.<sup>361</sup>

. . . .

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the

 $<sup>^{360}</sup>$  C-2, Mobil I Award ¶ 128-129 & n.62 (noting that Canada accepted the compensability of claimed community contributions and awarding them as incremental expenditures).

<sup>&</sup>lt;sup>361</sup> **CW-3**, Sampath Statement I ¶¶ 154-155.

Guidelines.<sup>362</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>363</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>364</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

See also CW-10, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>363</sup> *Id*.

<sup>&</sup>lt;sup>362</sup> *Id.* ¶ 133.

<sup>&</sup>lt;sup>364</sup> *Id.* ¶ 132. See also paragraphs 39 through 42, above.

#### 25.Fortune Head Interpretation Centre Improvements (\$852,000)

#### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 142-143

The Fortune Head Ecological Reserve in Newfoundland is a geological site containing fossils that are hundreds of millions years old. The Fortune Head Interpretation Centre, operated by the not-for-profit Fortune Head ECO Friends, Inc., houses self-guided exhibits that tell the story of the fossil finds at the Reserve.

Fortune Head ECO Friends requested that HMDC replace and expand the exhibit space to include more interactive and up-to-date exhibits, and to fund the salaries of seasonal educational staffers.<sup>365</sup> In 2013, HMDC donated \$852,000 to the organization.<sup>366</sup> As with similar contributions to public educational centers in the Province—such as the Johnson GEO Centre and the Manuels River Education Centre—HMDC would not have made this contribution in the absence of the Guidelines.

#### **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that this expenditure is compensable because HMDC would not have made this "community contribution" in the absence of the Guidelines.<sup>367</sup> The documents, however, show that HMDC valued receipt of positive recognition for this contribution



<sup>365</sup> **C-309**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (September 26, 2013), *attaching* Fortune Head Interpretation Centre and Ecological Reserve Support.

<sup>366</sup> **C-212**, Hibernia 2013 Board R&D Decisions, Appendix B.

<sup>367</sup> **CW-3**, Sampath Statement I ¶ 133.

<sup>368</sup> **R-136**, Letter of Agreement between HMDC and Fortune Head ECO Friends Inc. for Improvements to the Fortune Head Interpretation Centre and Ecological Reserve (Nov. 6, 2013), p. MICI 0002588.

.<sup>369</sup> Further, Fortune Head states:

HMDC then went further and released a press release and received press coverage and public gratitude from the Centre for this expenditure.<sup>371</sup> Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have provided this community contribution of \$852,000 to the Fortune Head Interpretation Centre. Indeed, in the Mobil I Arbitration, Canada did not even challenge the vast majority of the community contributions, which the Mobil I Majority awarded.<sup>372</sup> This is just

<sup>369</sup> *Ibid*, p. MICI 0002589.

<sup>370</sup> **C-309**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching Fortune Head Interpretation Centre and Ecological Reserve Support (Sep. 26, 2013), p. MOB0005651.

<sup>371</sup> **R-137**, Hibernia News Release, "Hibernia funding supports upgrades to Fortune Head Centre" Available Interpretation 2014). (Jun. 9, at: http://www.hibernia.ca/news/2014/FortuneHead.pdf; R-138, Fortune Head Geology Centre website excerpt, "About" (Undated). Available at: http://www.fortunehead.com/#!about/cee5; R-139, The Telegram News Article, "Community Heroes: \$800K from Hibernia supports Fortune Head Interpretation Centre" (Jun. 9, 2014). Available at: http://www.thetelegram.com/Community/2014-06-09/article-3755753/Community-Heroes%3A-\$800K-from-Hibernia-supports-Fortune-Head-Interpretation-Centre/1; R-140, The Southern Gazette website excerpt, "Community Heroes" http://www.southerngazette.ca/Community/Community-Heroes-(Undated). Available at: 1033/content/1; R-141, Cape Breton Post website excerpt, "Community Heroes" (Undated). Available at: http://www.capebretonpost.com/Community/Community-Heroes-1033/content/1.

 $^{372}$  C-2, Mobil I Award ¶ 128-129 & n.62 (noting that Canada accepted the compensability of claimed community contributions and awarding them as incremental expenditures).

another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>373</sup>

Before the enforcement of the Guidelines, HMDC did not make community contributions of this magnitude. Indeed, in the Mobil I Arbitration, Canada did not even challenge the vast majority of the community contributions, which the Mobil I Majority awarded.<sup>374</sup> Mr. Sampath's additional testimony in his second witness statement only reinforces the conclusion that this community contribution—in addition to the millions of dollars in other community contributions claimed in this proceeding—is incremental.

#### CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

••••

• Fortune Head Interpretation Centre Improvements;<sup>375</sup>

• • • •

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>376</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>377</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest

<sup>376</sup> *Id.* ¶ 133.

<sup>377</sup> Id.

<sup>&</sup>lt;sup>373</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

 $<sup>^{374}</sup>$  C-2, Mobil I Award ¶ 128-129 & n.62 (noting that Canada accepted the compensability of claimed community contributions and awarding them as incremental expenditures).

<sup>&</sup>lt;sup>375</sup> **CW-3**, Sampath Statement I ¶¶ 142-143.

project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>378</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>&</sup>lt;sup>378</sup> *Id.* ¶ 132. See also paragraphs 39 through 42, above.

)

#### 26. Gas Utilization Study (WAG Pilot) (

#### A. First Witness Statement(s)

#### CW-5, Noseworthy Statement I ¶¶ 19-25

After the implementation of the Guidelines in 2009, one of the ideas that we decided to explore in fulfilling our R&D obligations was enhanced oil recovery ("EOR") techniques that could conceivably be useful at Hibernia when the field's oil reserves start to deplete. In the Hibernia Work Plan of 2010, which the Board required to show how the Hibernia project planned to spend down its then-sizeable shortfall in R&D spending, Hibernia proposed an EOR project called the "Gas Utilization Study (WAG Pilot)."<sup>379</sup> (Because there are many different ways in which gas can be utilized, and Water-Alternating-Gas ("WAG") techniques constitute just one of those uses, I will refer to this R&D project as the "WAG Pilot" to avoid confusion.) I understand that the Mobil I tribunal determined that the WAG Pilot was an incremental expenditure and awarded compensation to the Claimants for costs they incurred through April 30, 2012.<sup>380</sup> I also understand that since that date, the Hibernia project has spent significant additional amounts on the WAG Pilot program.<sup>381</sup>

WAG involves injecting both water and gas into a well to increase oil recovery (due to gravity, water typically migrates to the bottom of a reservoir while gas rises to the top; using both water and gas injection may allow us to recover more oil than we would otherwise). While WAG is an industry-accepted technique to some extent, it is not used at every project and its success is dependent on a reservoir's properties and behavior. To my knowledge, large scale WAG has never been

<sup>&</sup>lt;sup>379</sup> **C-162**, Hibernia Work Plan, at pp. 2, 6, 10-11.

<sup>&</sup>lt;sup>380</sup> **C-2**, Mobil I Award ¶¶ 62-63.

<sup>&</sup>lt;sup>381</sup> C-206, Letter from J. Bugden, CNLOPB, to J. Long, HMDC (June 7, 2013), *attaching* Hibernia May-December 2012 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations (hereafter, "Hibernia May-December 2012 Board R&D Decisions"), Appendix A (1997); C-212, Letter from M. Baker, CNLOPB, to J. Long, HMDC (May 20, 2014), *attaching* Hibernia 2013 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations, Appendix A (1997); C-192, Letter from M. Baker, CNLOPB, to J. Long, HMDC (June 1, 2015), *attaching* Hibernia 2014 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations, Appendix A (1997); C-251, Hibernia January-April 2015 Board R&D Decisions, Appendix A (1997)); C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A (1997)).

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employed before in the Grand Banks area offshore Newfoundland.<sup>382</sup> I understand it is only infrequently employed by ExxonMobil worldwide.

It is my understanding that when HMDC first presented the idea for a WAG Pilot to the Board in the March 2010 Work Plan, the Board was inclined not to preapprove it. I understand HMDC was also constrained by

to undertake the

#### Pilot.

Still, the WAG Pilot was a big dollar item that we were keen to advance so that we could spend down a significant portion of our Guidelines obligation. As a result, HMDC devised a new approach to the WAG Pilot that would combat both the lack of local capacity and the Board's reluctance to pre-approve the expenditure: we would provide MUN with a new EOR laboratory and the necessary equipment, and then a research team consisting of MUN professors and graduate students would help undertake the Pilot.<sup>384</sup> The Board has been particularly keen on capacity-building projects in the Province, which made us more confident that the amended proposal would be accepted for pre-approval. And indeed it was.

If the Guidelines were not in place, I am certain that neither HMDC nor ExxonMobil would have paid to have the MUN EOR laboratory built and equipped. ExxonMobil already has the capacity to conduct this research through , whose resources HMDC can leverage through service agreements. We have simply duplicated facilities. Moreover, we have paid for the actual research to be done both at MUN and . As part of the Pilot, we will take the results of research that was conducted and will have MUN undertake the same research to duplicate the results as a way to help build their capacity to do this type of work. Also, we do not own the MUN laboratory or control it. In essence, we have donated the funds for the laboratory to be built and are now also paying MUN to duplicate the research.

Gas is a very limited resource at Hibernia. Implementing a WAG Pilot at this early stage would require us to divert gas from the existing gas-injection area at Hibernia

<sup>383</sup> See, e.g., id.

<sup>384</sup> C-330, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study, at p. 4 (Oct. 2010).

<sup>&</sup>lt;sup>382</sup> **C-162**, Hibernia Work Plan, at p. 10.

which in turn would decrease oil production from these already-developed wells. Absent the WAG Pilot, we would be continuing our ordinary course of business practice of devoting *all* of the gas produced at Hibernia to the gas-injection (as well as fuel and flare).<sup>385</sup>

For that additional reason, I believe that we would not have considered the WAG Pilot that soon in the normal course of business.

In concluding that we would not have done the WAG Pilot in the ordinary course of business, it is also worth noting that

; sometimes it makes more economic sense to just abandon the field once we have exhausted normal production techniques. There are very few fields where you recover more than 50%. In fact, because I understand that we had predicted a **second recovery** rate at Hibernia through conventional production techniques, the field was already at the high-end of the scale. In my opinion, this actually makes EOR even less likely at Hibernia because the incremental recovery we may be able to achieve is less than would typically be expected from EOR field development.

### **B.** Appendix A to Canada's Counter Memorial

The Gas Utilization Study (WAG Pilot) aims at investigating alternative uses of gas to enhance oil recovery at the Hibernia field. If successful, the Claimant estimates that the project will recover barrels of oil. <sup>386</sup>

<sup>&</sup>lt;sup>385</sup> See C-343, CNLOPB, Staff Analysis: Hibernia Development Plan Amendment, at p. 33 (Sept. 2, 2010) ("Since gas injection began in 2000, 90% of the gas produced has been re-injected into the reservoir for pressure maintenance and to optimize oil recovery in Hibernia gasflood fault blocks. Produced gas is also used as the primary fuel source for the platform, accounting for 6-8% of gas production on average. A certain amount of gas is flared to maintain a pilot flare for unplanned production upsets, which accounts for less than 1-2% of the total gas volume produced. The Proponent has reducing the annual amount flared for the last three years, staying well below the regulated annual limit. Starting in 2012, a portion of the gas produced will be used for gas lift as well.").

<sup>&</sup>lt;sup>386</sup> **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), p. 2 (p. MOB0006005).

387 The Claimant seeks approximately in compensation from Canada for its expenses relating to this expenditure between 2012-2015. It is the largest R&D expenditure for which the Claimant seeks compensation in this arbitration. In support of its claim, the Claimant filed only two exhibits with its Memorial, both from the year 2010,<sup>388</sup> which is prior to the 2012-2015 period over which the Claimant seeks damages. On March 29, 2016, Canada requested documents from the Claimant concerning this expenditure pursuant to the document production process. On April 12, 2016, the Claimant refused to produce any documents concerning its claim. On May 18, 2016, the Tribunal issued Procedural Order #4 and denied Canada's request for documents concerning this expenditure. With respect, the Tribunal's decision imposes a serious prejudice on Canada who otherwise has no basis on which to assess the credibility of the Claimant's claim for in damages. Despite the Tribunal's ruling, the Claimant nonetheless produced to Canada a limited number of documents concerning the Gas Utilization Study. These limited documents alone raise serious questions concerning the narrative spun by the Claimant to support its claim that it should be compensated for this clearly significant effort to enhance oil recovery from the Hibernia oil field.

First, the Claimant's witness, Mr. Noseworthy, opines without any documentary support that the Claimant would not likely engage EOR at Hibernia

					The	documents,	however,
contradict	Mr.	Noseworthy's	opinion.	For examp	le, the	documents stat	te:

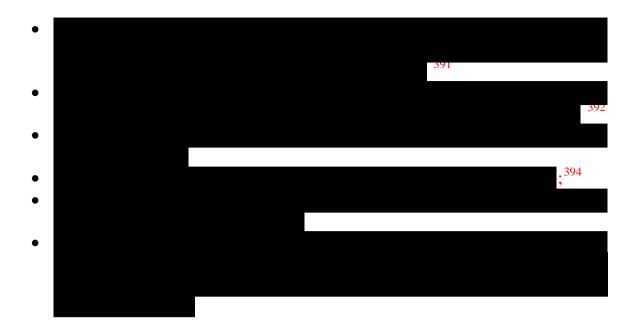
٠		

<sup>387</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002617.

<sup>388</sup> C-162, HMDC, Hibernia R&D Work Plan to Meet CNLOPB R&D Guidelines (Mar. 31, 2010); C-330, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010). The Claimant's witness, Mr. Noseworthy, also cites C-206, C-212, C-192, C-251, and C-216, which are the annual R&D reports submitted by HMDC to the Board. None of these documents contain any details concerning the Gas Utilization Study.

<sup>389</sup> **CW-5**, Noseworthy Statement I ¶ 25.

<sup>390</sup> **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), p. 1 (p. MOB0006004) (emphasis added).



These quotes are a mere few examples from the limited number of documents provided by the Claimant. It is manifestly unfair that Canada should be deprived of full document production concerning the Claimant's claim for this R&D expenditure. It is also unfair for the Claimant to seek full compensation in this arbitration for its efforts to enhance oil recovery from the Hibernia reservoirs.

<sup>391</sup> *Ibid*, p. 3 (p. MOB0006006).

<sup>392</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002617.

<sup>393</sup> *Ibid*, p. MICI 0002622.

<sup>394</sup> **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013), p. MICI 0005020.

<sup>395</sup> *Ibid*, p. MICI 0005028.

<sup>396</sup> **R-90**, Letter from Paul Leonard, HMDC to Hibernia Executive Committee Members attaching Authority for Expenditure for Gas Utilization Study R&D Project (Mar. 24, 2011), p. MICI0005090. See also, **R-142**, HMDC Presentation, Gas Utilization R&D Study CNLOPB Review (Oct. 14, 2010); **R-143**, URC Proposal, Hibernia WAG Pilot ICD Study (Draft) (Undated); **R-144**, ExxonMobil Upstream Research Company, Research Application Work Proposal for Hibernia Gas Utilization Study URC Report (2011); **R-145**, HMDC Presentation, Gas Utilization Study R&D Project, MUN EOR Lab Kick-Off Meeting (Mar. 30, 2012); **R-146**, ExxonMobil Production Presentation, Hibernia WAG Pilot – Overview (Apr. 2013).

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Second, Mr. Noseworthy opines that it is only as a result of the 2004 Guidelines that the Gas Utilization Study is being engaged.<sup>397</sup> The documents, however, state that



The documents thus confirm that the 2004 Guidelines are only the final reason for engaging the expenditure and were not its driving force.

Third, Mr. Noseworthy opines that the Claimant should be compensated for this expenditure because it involved the construction of an EOR laboratory at Memorial University ("MUN") in the Province and absent the 2004 Guidelines he is "certain that neither HMDC nor ExxonMobil would have paid to have the MUN EOR laboratory built and equipped."<sup>399</sup> However, the Claimant already claimed and received compensation for this aspect of the Gas Utilization Study in the Mobil/Murphy arbitration. Mr. Noseworthy merely copied and pasted this aspect from the statement he filed in the Mobil/Murphy arbitration without acknowledging the difference in the types of expenditures related to this project.

Fourth, Mr. Noseworthy alleges that the EOR laboratory at MUN will merely "duplicate" the research done by the Claimant's Upstream Research Facility ("URC") in Houston.<sup>401</sup> Again, he provides no documentary support for this

<sup>&</sup>lt;sup>397</sup> **CW-5**, Noseworthy Statement I  $\P$  23.

<sup>&</sup>lt;sup>398</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618; **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013), p. MICI 0005021.

<sup>&</sup>lt;sup>399</sup> **CW-5**, Noseworthy Statement I  $\P$  23.

<sup>&</sup>lt;sup>400</sup> **C-2**, Mobil/Murphy – Award ¶¶ 58-63.

<sup>&</sup>lt;sup>401</sup> **CW-5**, Noseworthy Statement I  $\P$  23.

statement, which conflicts with the limited documents that Canada has obtained. For example, one document states:

 $^{402}$  and Figure 5 shows how

each entity is engaged in *different* rather than duplicative work.<sup>403</sup>

Fifth, while Mr. Noseworthy confesses that the Claimant may have engaged the Gas Utilization Study in the "ordinary course of business" in the future,<sup>404</sup> he argues that they would not have considered engaging the expenditure at this stage of operations.<sup>405</sup> However, the documents state that the study has specifically been

They also state that

<sup>407</sup> Thus, again, the 2004 Guidelines are only one reason for engaging the project now and not its driving force as Mr. Noseworhty opines.

Lastly, the documents show that the Claimant intends to use the results of the Gas Utilization Study at its projects in

<sup>408</sup> Mr. Noseworthy's understanding that the technique is "infrequently employ[ed]" by the Claimant in its worldwide operations is thus wrong.<sup>409</sup>

<sup>403</sup> *Ibid*, p. MICI 0002626.

 $^{404}$  **R-147**, *Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada* (ICSID Case No. ARB(AF)/07/4) Witness Statement of Ryan Noseworthy dated November 30, 2012 ¶ 31.

 $^{405}$  **CW-5**, Noseworthy Statement I ¶ 24.

<sup>406</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618.

<sup>407</sup> **R-148**, ExxonMobil Upstream Research Presentation: Potential Value in Flood Management Tools (Oct. 17, 2012), slide 10 (p. MICI 0005106).

<sup>408</sup> **R-149**, ExxonMobil Upstream Research Presentation: Review of Hibernia Flood Management Tool Proposal (Sep. 7, 2012), slide 3 (p. MICI 0005119).

<sup>409</sup> **CW-5**, Noseworthy Statement I  $\P$  20.

<sup>&</sup>lt;sup>402</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618.

Canadian taxpayers should not be required to pay the Claimant for its significant efforts to enhance oil production from the Hibernia oil field. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

The incremental nature of the Gas Utilization Study, or WAG Pilot, is *res judicata* and cannot be questioned in this proceeding. The Mobil I Majority held as follows in relation to the expenditures for the EOR laboratory component of the overall project:

The Majority finds that the Claimants have proven that this expenditure is incremental....

The Majority finds it significant that a laboratory was constructed to carry out the Gas Utilization Study in the Province, even though

. The MUN laboratory is a reproduction of the laboratory that is already established . This duplication is persuasive evidence that represents an expenditure that was motivated by the Guidelines. It is also significant that initially the Claimants did not apply for pre-approval of construction of the laboratory; this aspect was added later to the Gas Utilization Study project , which in turn was hoped would increase the likelihood that this expenditure met the Guidelines and would be pre-approved. These factors in combination demonstrate that this expenditure would not have been made in the ordinary course of business in the absence of the Guidelines. . . .

Canada does not dispute the Mobil I Majority's final disposition on the incremental nature of the EOR laboratory expenditures as a part of the WAG Pilot study, and this disposition should not be reopened in this proceeding. Since the time period at issue in the Mobil I Arbitration, HMDC contributed an additional **MUN** to set up the EOR laboratory, as Mr. Phelan recounts in his testimony, copied below.

 $<sup>^{410}</sup>$  C-2, Mobil I Award ¶¶ 62-63 (footnotes omitted).

The other expenditure components of the Hibernia WAG Pilot are incremental, as well. It is highly significant to the present inquiry that the WAG Pilot was conceived as part of Hibernia's 2010 Work Plan, the purpose of which was to "generat[e] a few large-scale opportunities" for R&D expenditures in furtherance of Hibernia's obligations under the Guidelines.<sup>411</sup> As Mr. Noteworthy elaborates further in his second witness statement, copied below, none of the 2012-2015 expenditures relating to the Hibernia WAG Pilot would have been incurred in the absence of the Guidelines.

Canada's concern for "serious prejudice" resulting from the Tribunal's decision on Canada's document request is unfounded. As reflected in Mobil's letter to the Tribunal of May 12, 2016 (which, of course, post-dates the communication of April 12, 2016 referenced by Canada), Mobil offered to Canada to produce responsive documents relative to the WAG Pilot that were created in or after February 2009. Canada rejected this offer, insisting instead on an unlimited date range. After the Tribunal's decision on the document request, Mobil wrote to Canada by email on May 27, 2016, to indicate that it would produce documents concerning this request. Indeed, as confirmed by Canada's Appendix A, Canada received more than sufficient documents to consider the incremental nature of this expenditure.

### CW-11, Noseworthy Statement II ¶¶ 3-32

The WAG Pilot formed part of the 2010 Work Plan adopted to help the Hibernia project achieve its research and development ("R&D") expenditure obligations under the Guidelines.<sup>412</sup>

In this statement, I first expand on the comments I gave in my first witness statement regarding the WAG Pilot and why HMDC would not have undertaken it but for the need to make eligible expenditures under the Guidelines. I then correct a comment appearing in Canada's Counter Memorial implying that the Hibernia WAG Pilot has become a "major activity of enhanced oil recovery,"<sup>413</sup> which is not accurate. Finally, I address several of the documents referenced by Canada in the Appendix A to its Counter Memorial ("Counter Memorial Appendix A" or

<sup>&</sup>lt;sup>411</sup> **CW-4**, Ringvee Statement I ¶ 23. See also **C-1**, Mobil I Decision ¶ 93.

<sup>&</sup>lt;sup>412</sup> **C-162**, HMDC, Hibernia R&D Work Plan to Meet CNLOPB R&D Guidelines (Mar. 31, 2010), at MOB0003023 to MOB0003024, MOB0003044 to MOB0003047.

<sup>&</sup>lt;sup>413</sup> Counter Memorial ¶ 222.

"Appendix A"). Contrary to Canada's interpretation of these documents, they do not contradict my testimony or otherwise show that the 2012-2015 expenditures for the Hibernia WAG Pilot would have been made in the ordinary course of business.

### Additional Comments on the WAG Pilot

The Canada-Newfoundland and Labrador Offshore Petroleum Board (the "Board") approved expenditures associated with the Hibernia WAG Pilot for eligibility under the Guidelines. As the Hibernia Reservoir Supervisor, I was intimately familiar with the WAG Pilot, in addition to the ordinary course operations at the Hibernia Project. Based on my personal familiarity with the WAG Pilot, in addition to my knowledge of the Hibernia project overall, I am confident that the 2012-2015 expenditures relating to the WAG Pilot would not have been made in the ordinary course of business. HMDC ordinarily would not have funded any enhanced oil recovery ("EOR") pilot at this stage in the productive life of the field, and it is far from certain whether in the future HMDC would ever have decided to move forward with an R&D project like the WAG Pilot at issue. Below, I discuss in greater detail the several considerations that inform my conclusion that the WAG Pilot expenditures at issue in this arbitration would not have been made in the ordinary course of business.

To begin, the early timing of the Hibernia WAG Pilot sets it apart from ordinary EOR programs. The end of field life at Hibernia using conventional extraction techniques—that is, predominantly gas flood and water flood—is estimated to occur after the year 2040. Yet HMDC began preparing to implement the WAG Pilot project in as early as 2010 as part of the 2010 Work Plan adopted to help the Hibernia project achieve its R&D expenditure obligations under the Guidelines. Initiating any EOR program so early in the life of a field that is still producing significant oil rates is extraordinary, and there is nothing peculiar about the Hibernia field that would have required HMDC to begin implementing EOR some thirty years before the end of field life. At Hibernia, it would ordinarily not make sense to begin studying EOR techniques like WAG until

when the gas supply is more readily available. At that point in the future, one or more EOR options might be studied prior to any actual in-field implementation. It is also entirely possible that no EOR program would be implemented. Moreover, future advances in available technology or processes could significantly alter how the Hibernia WAG Pilot would be designed, or whether it would even be implemented at all.

The unusual manner in which the Hibernia WAG Pilot was designed and implemented is further evidence that it did not form part of the Hibernia project's ordinary operations. In the ordinary course of business, every investment expenditure and engineering design would be scrutinized to ensure that it made technical sense and economic sense. However, this was not the general approach followed by my team in carrying out the Hibernia WAG Pilot. Rather, the Hibernia project's need to make Guidelines-eligible R&D expenditures permeated my team's decisions pertaining to the design and implementation of the Hibernia WAG Pilot. In our discussions of various design aspects relating to the Hibernia WAG Pilot, the Hibernia project's need to make Guidelines-eligible R&D expenditures was front and center. Because this regulatory need was the driver behind the entire project, several aspects of the WAG Pilot were higher risk and higher cost, contrary to the way that we would normally plan for and conduct operations in the field.

For instance, in the ordinary course of business, the operator would prefer

Yet when I was leading the

team at HMDC stewarding the WAG Pilot, we instead looked at

Under ordinary conditions, this incremental investment approach to conducting the WAG Pilot would be economically challenged. But because the additional expenditures for the WAG Pilot for the WAG Pilot would qualify for credit under the Guidelines, they were acceptable to HMDC's management at the time. In a similar vein, while the set-up of the EOR laboratory at Memorial University of Newfoundland ("MUN") duplicated facilities to which HMDC already had access, the expenditures associated with this laboratory were acceptable because they helped to satisfy the Hibernia project's expenditure obligations under the Guidelines.<sup>414</sup>

### Canada's Contentions About the WAG Pilot

I have been asked to comment on the following statement in Canada's Counter Memorial concerning the status of the Hibernia WAG Pilot:

"While certain initial expenditures in 2010 and 2011 relating to this R&D project were deemed compensable by the Mobil/Murphy tribunal, since that time, the Claimant has leveraged this R&D investment into a major activity of enhanced oil recovery ('EOR') for the Hibernia project that it expects will yield more barrels of oil and extend the life of the Hibernia field."<sup>415</sup>

<sup>&</sup>lt;sup>414</sup> **CW-5**, Noseworthy Statement I ¶ 22-23.

 $<sup>^{415}</sup>$  Counter Memorial ¶ 222 (footnotes omitted). The originally stated figure of is corrected to read

This statement by Canada is not correct.

*First*, it is not accurate that the WAG Pilot has been "leveraged . . . into a major activity of enhanced oil recovery." HMDC has incurred a substantial amount of expenditures associated with the WAG Pilot, largely consisting of the costs to fund the set-up of the EOR Laboratory at MUN,

and . But to date, the WAG Pilot has not been executed in the field, meaning there has been zero incremental oil recovery at Hibernia using the WAG technique. When this project was initially planned, the in-field implementation of the WAG .<sup>416</sup> Since then, HMDC repeatedly Pilot was scheduled to start in postponed the start date The HMDC operations personnel recently informed me that the WAG Pilot is presently , but there is no guarantee that the start date will scheduled to not be pushed back yet again. The repeated postponements go to show that HMDC prioritized its ordinary operations over diverting additional human and financial resources to the WAG Pilot, which was conceived and carried out for purposes of generating expenditures that satisfy the requirements of the Guidelines.

Moreover, the WAG Pilot is just that—a pilot. If it is ever implemented in the field, it will likely be tested for the pilot for the current status and likely trajectory of the WAG Pilot, Canada's characterization of the WAG Pilot as a "major activity of enhanced oil recovery" is inaccurate. In fact, because the Hibernia WAG Pilot has not been implemented in the field, it has generated absolutely no value to the overall Hibernia project.

*Second*, it is not correct that the WAG Pilot is "expect[ed]" to "yield more barrels of oil and extend the life of the Hibernia field." The notional figure of barrels of oil to the Board appeared in HMDC's preapproval application for the expenditures associated with the WAG Pilot.<sup>418</sup> But

<sup>416</sup> **C-162**, HMDC, Hibernia R&D Work Plan to Meet CNLOPB R&D Guidelines (Mar. 31, 2010), at MOB0003024.

<sup>417</sup> See paragraphs 12 through 15, below.

<sup>418</sup> **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), p. 1 (p. MOB0006004). See also **C-162**, HMDC, Hibernia R&D Work Plan to Meet CNLOPB R&D Guidelines (Mar. 31, 2010), at MOB0003045. this number represents only a "*potential* to increase recovery."<sup>419</sup> It is entirely possible that neither WAG nor any other EOR program would ever be implemented on a field-wide basis at the Hibernia project. As a general rule, the higher the oil recovery is in the "base case" using conventional techniques, the lower the probability an EOR program will generate economic incremental oil recovery. The Hibernia oil field already had a higher-than-average predicted recovery rate of **100000**, as I mentioned in my first witness statement.<sup>420</sup> Because of this high oil recovery rate using conventional techniques, the chance that any full-field EOR technique will ever be utilized at the Hibernia field is lower. In my experience, EOR techniques are used at fields with much lower estimated recoveries.

Indeed, at most oil fields, it makes sense not to undertake any EOR program at all to attempt to extend the productive life of the field. In other words, "doing nothing" is often a perfectly valid economic alternative to performing EOR. EOR techniques for producing oil are more costly and less productive than conventional techniques, making actual deployment of field-wide EOR programs relatively rare. By ceasing production and abandoning or selling a field after the conventional recovery program has run its course, the field owners can invest in other projects with better prospects of economic return on their investment.



In summary, the figure corresponds to an unlikely success case that assumes a number of unproven and improbable contingencies:

	In short, the notional figure of an
additional	barrels of oil is not weighted for the risk of failure of the

<sup>419</sup> **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), p. 1 (p. MOB0006004) (emphasis added).

<sup>420</sup> **CW-5**, Noseworthy Statement I ¶ 25.

WAG Pilot, nor the potential risk that it will not be implemented field wide. Given current oil prices, and the limited gas supply at Hibernia, I expect it is highly unlikely the barrels of incremental oil recovery will ever be achieved. In this connection, I note that when the WAG Pilot project was presented to the Board in 2010 as part of Hibernia's Work Plan to spend down its then-outstanding shortfall under the Guidelines, it was noted that

### Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (C-330)

In its Appendix A, Canada contends that HMDC's project abstract regarding the WAG Pilot "contradict[s]" my testimony.<sup>422</sup> As I discuss below, this document, including the excerpts referenced by Canada, do not contradict my testimony.

For background, this project abstract, dated October 2010, was presented to the Board when HMDC was seeking pre-approval under the Guidelines for the WAG Pilot.<sup>423</sup> As I discussed in my first witness statement, the Board was initially disinclined to pre-approve the expenditures associated with the WAG Pilot.<sup>424</sup> Thus, the original proposal<sup>425</sup> was revised so that MUN would receive an EOR laboratory as part of the overall project.<sup>426</sup> The October 2010 project abstract represents the proposal as revised.

As Canada notes, the October 2010 project abstract states that

and that

Canada appears to imply that these statements mean that the

<sup>421</sup> **C-162**, HMDC, Hibernia R&D Work Plan to Meet CNLOPB R&D Guidelines (Mar. 31, 2010), at MOB0003023, MOB0003045.

<sup>422</sup> Counter Memorial Appendix A, A-32.

<sup>423</sup> **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010).

<sup>424</sup> **CW-5**, Noseworthy Statement I ¶ 21.

<sup>425</sup> **C-162**, HMDC, Hibernia R&D Work Plan to Meet CNLOPB R&D Guidelines (Mar. 31, 2010), at MOB0003023 to MOB0003024, MOB0003044 to MOB0003047.

<sup>426</sup> **CW-5**, Noseworthy Statement I ¶ 22; **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), at MOB0006007.

<sup>427</sup> Counter Memorial Appendix A, A-32 (citing **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), p. 1 (p. MOB0006004).

WAG Pilot was necessary to the Hibernia project's success. Canada's implication is not accurate. For virtually any oil field, conventional recovery techniques will eventually fail to yield a commercially significant amount of oil; thus, if any additional recovery can be achieved, an enhanced oil recovery technique could be deployed. But that does not mean that an operator would implement any EOR program, as EOR programs tend to be less economical than conventional techniques and entail lesser chances of technical and commercial success.<sup>428</sup> Moreover, as discussed above,

On a related note, the revised statements in this project abstract should be considered in light of the document's purpose, which was to advocate the WAG Pilot to the Board for purposes of obtaining pre-qualification under the Guidelines of the project-related expenditures. This is why the project component of donating EOR laboratory equipment to MUN was added.<sup>430</sup> In a similar vein, the project abstract highlights potential upsides of the WAG Pilot, including the

barrels of oil of additional potential recovery. However, this is not a risk-weighted figure and does not account for the potential failure of the WAG pilot, or a decision not to implement WAG throughout the Hibernia field, as I discuss at paragraphs 12 through 15 of this statement.

### John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (R-91); John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (R-92)

This paper and related presentation were developed for a Society of Petroleum Engineers ("SPE") conference in Kuala Lumpur in July 2013.<sup>431</sup> I was one of the credited co-authors of the paper, which was also worked on by several researchers and professionals at ExxonMobil Upstream Research Company ("URC"), HMDC, and MUN.

<sup>431</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013).

<sup>&</sup>lt;sup>428</sup> See paragraph 13, above.

<sup>&</sup>lt;sup>429</sup> See paragraph 15, above.

<sup>&</sup>lt;sup>430</sup> **CW-5**, Noseworthy Statement I ¶¶ 22-23.

The fact that the Hibernia WAG Pilot was discussed in a SPE paper is, in itself, a testament to how rarely this type of EOR technique is used in the offshore oil industry. The authors, including myself, came up with this paper topic because we thought other petroleum engineers would be interested in learning about a relatively uncommon recovery technique.

In Appendix A to the Counter Memorial, Canada has referenced a handful of statements in this paper and the related presentation and contend that they contradict my testimony. A couple of the statements referenced by Canada allude to the need to weigh different recovery options:



These statements do not show that the WAG Pilot was necessary to optimizing field recovery. An important piece of context is that the Hibernia gravity base structure has only for the entire Hibernia and BNA reservoirs—we would therefore call Hibernia a "slot limited" or "slot constrained" platform. As production falls at a given well slot using conventional techniques, the operator faces a choice about what to do with that well slot: It can drill a new well somewhere else, or it can implement EOR with the existing well. EOR almost always falls to the bottom of the possible alternatives, given the relatively lower cost and higher chance of success of drilling a new well. Thus, when the documents speak of 434 and the

they are alluding to this choice. But they do not mean that HMDC needs the WAG Pilot at this early stage of the projects life to evaluate its well slot alternatives or to otherwise optimize recovery.

<sup>&</sup>lt;sup>432</sup> Counter Memorial Appendix A, A-33 (citing **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002617).

<sup>&</sup>lt;sup>433</sup> *Id.* (citing **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013), p. MICI 0005020).

<sup>&</sup>lt;sup>434</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002617).

<sup>&</sup>lt;sup>435</sup> **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013), p. MICI 0005020).

Canada additionally references statements speaking of a

<sup>436</sup> and

Canada appears to imply by these quotations that the WAG Pilot has already marked a new phase in the Hibernia project. But as discussed above,<sup>438</sup> the WAG Pilot has not even been implemented in the field, and full field WAG at Hibernia is unlikely.<sup>439</sup>

Canada references a list of the WAG Pilot's objectives that includes

at the end.<sup>440</sup> According to Canada, the fact that this objective is listed as "the final reason for engaging the expenditure" means that the Guidelines "were not its driving force."<sup>441</sup> Canada makes too much of the ordering of this list. The other items on the list effectively pertain to the scope of the project, including

#### and

<sup>442</sup> They would be more relevant to the intended audience of the paper, though they do not represent the driving purpose of the Hibernia WAG Pilot. Rather, as discussed elsewhere in this witness statement and my first witness statement, the driving purpose of pursing the WAG Pilot was to help the Hibernia project meet its spending obligations under the Guidelines.<sup>443</sup>

As I observed in my first witness statement, HMDC's donation to have an EOR laboratory set up at MUN effectively duplicates facilities to which

<sup>437</sup> *Id.* (citing **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013), p. MICI 0005028).

<sup>438</sup> See paragraphs 10 through 13, above.

<sup>439</sup> See also **CW-5**, Noseworthy Statement I ¶¶ 24-25.

<sup>440</sup> Counter Memorial Appendix A, A-34 (citing **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618; **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013), p. MICI 0005021).

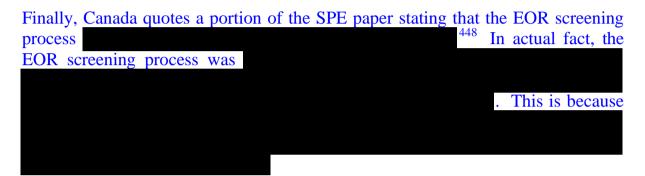
<sup>441</sup> *Id*.

<sup>442</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618.

 $^{443}$  See paragraphs 5 to 8; **CW-5**, Noseworthy Statement I  $\P\P$  24-25.

<sup>&</sup>lt;sup>436</sup> Counter Memorial Appendix A, A-33 (citing **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002622).

HMDC already had access.<sup>444</sup> In contrast, Canada contends that MUN "is engaged in *different* rather than duplicative work," and for support references a diagram in the SPE paper showing a conceptual relationship of the several components of the overall project.<sup>445</sup> Canada's interpretation is not correct. Notably, this diagram was derived from the October 2010 project abstract submitted by HMDC to the Board when the EOR laboratory component was added to help secure the Board's pre-approval for eligibility under the Guidelines.<sup>446</sup> There is a reason that MUN's involvement was not contemplated in the first iteration of the Gas Utilization Study project proposal: MUN's involvement was unnecessary. Indeed, HMDC obtained the advanced analyses that it needed to support the WAG Pilot



Letter from Paul Leonard, HMDC to Hibernia Executive Committee Members attaching Authority for Expenditure for Gas Utilization Study R&D Project (R-90)

This document is a request for authority for expenditure regarding the Gas Utilization Study (WAG Pilot) sent by HMDC's then president, Paul Leonard, to the members of the Hibernia Executive Committee.<sup>449</sup> I do not understand why

<sup>445</sup> Counter Memorial Appendix A, A-35 (citing **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618, MICI 0002626).

<sup>446</sup> **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), at p. MOB0006005; **CW-5**, Noseworthy Statement I ¶ 22.

<sup>447</sup> **CW-5**, Noseworthy Statement I  $\P$  23.

<sup>448</sup> Counter Memorial Appendix A, A-36 (**R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618).

<sup>449</sup> **R-90**, Letter from Paul Leonard, HMDC to Hibernia Executive Committee Members attaching Authority for Expenditure for Gas Utilization Study R&D Project (Mar. 24, 2011).

<sup>&</sup>lt;sup>444</sup> **CW-5**, Noseworthy Statement I ¶ 23.

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Canada thinks this document shows that Gas Utilization Study expenditures were made in the ordinary course of business. The first paragraph of Mr. Leonard's letter states the reason for this expenditure: "The Gas Utilization Project was prequalified for R&D by the C-NLOPB in *Control of the control of t* 

Canada references two sentences of this letter:

this statement, the WAG Pilot would ordinarily not be pursued this early the Hibernia field's life, and most likely WAG will never be implemented on a field-wide basis.<sup>453</sup>

ExxonMobil Upstream Research Presentation: Potential Value in Flood Management Tools (R-148); ExxonMobil Upstream Research Presentation: Review of Hibernia Flood Management Tool Proposal (R-149)

<sup>450</sup> *Id*.

<sup>452</sup> **R-90**, Letter from Paul Leonard, HMDC to Hibernia Executive Committee Members attaching Authority for Expenditure for Gas Utilization Study R&D Project (Mar. 24, 2011), p. MICI 0005090 (emphasis added).

<sup>453</sup> See paragraphs 5-8 and 12-15, above.

<sup>&</sup>lt;sup>451</sup> Counter Memorial Appendix A, at A-33 (**R-90**, Letter from Paul Leonard, HMDC to Hibernia Executive Committee Members attaching Authority for Expenditure for Gas Utilization Study R&D Project (Mar. 24, 2011), p. MICI 0005090).

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Canada references a pair of presentations by John Lawrence,<sup>454</sup> who is and was one of my co-authors for the SPE paper about the Hibernia Gas Utilization Study.<sup>455</sup> The presentations concern Mr. Lawrence Mr. Lawrence

In or around 2012, I had some discussions with Mr. Lawrence

Lawrence

Canada has apparently conflated the with the Hibernia WAG Pilot. In fact, the had nothing to do with the WAG Pilot R&D program. Thus, where one of Mr. Lawrence's presentations states that the could be used at fields in and elsewhere, Canada is incorrect in interpreting this as meaning the Hibernia WAG Pilot results can be used at fields elsewhere.<sup>456</sup> The results of the

WAG Pilot, if it is ever carried out, will be unique to the Hibernia reservoir.

Where another presentation states that Hibernia was

<sup>57</sup> this should not be

<sup>454</sup> Counter Memorial Appendix A, at A-36 (citing **R-148**, ExxonMobil Upstream Research Presentation: Potential Value in Flood Management Tools (Oct. 17, 2012), and **R-149**, ExxonMobil Upstream Research Presentation: Review of Hibernia Flood Management Tool Proposal (Sep. 7, 2012)).

<sup>455</sup> **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013).

<sup>456</sup> Counter Memorial Appendix A, at A-36 (citing **R-149**, ExxonMobil Upstream Research Presentation: Review of Hibernia Flood Management Tool Proposal (Sep. 7, 2012), slide 3 (p. MICI 0005119)).

<sup>457</sup> *Id.* (citing **R-148**, ExxonMobil Upstream Research Presentation: Potential Value in Flood Management Tools (Oct. 17, 2012), slide 10 (p. MICI 0005106)).

understood to mean that had anything to do with the purpose of the WAG Pilot. Rather, the WAG Pilot program concept was developed in 2010 as part of the Hibernia project's overall Work Plan to satisfy its spending obligations under the Guidelines.<sup>458</sup>

### CW-9, Phelan Statement II ¶¶ 93-94

The Hibernia Gas Utilization Study, also known as the Hibernia WAG Pilot, is a multi-year R&D project funded by HMDC. The 2012-2015 expenditures relating to this project consist of multiple components, including the costs to establish an enhanced oil recovery ("EOR") laboratory at MUN,

, and

. The Board has consistently deemed all of the claimed in-Province expenditures relating to the Hibernia WAG Pilot as eligible for credit under the Guidelines.<sup>459</sup> Ryan Noseworthy, HMDC's former Reservoir Supervisor, has provided testimony in both the Mobil I Arbitration and in this arbitration concerning the Hibernia WAG Pilot.<sup>460</sup>

In Appendix A to the Counter Memorial, Canada observes that Mobil "already claimed and received compensation" in the Mobil I Arbitration for the costs to establish MUN's EOR laboratory, which is a correct statement in itself.<sup>461</sup>

<sup>459</sup> **C-189**, Letter from J. Bugden, CNLOPB, to W. Swett, HMDC (June 7, 2012), *attaching* 2011 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations, at p. MOB0003265 (Ref. # 5\_R&D\_HMDC); **C-224**, Letter from J. Bugden, CNLOPB, to \_\_\_\_\_\_, HMDC (June 28, 2012), *attaching* Hibernia January-April 2012 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations, at p. MOB0004412 (Ref. # 2\_R&D\_HMDC); **C-206**, Letter from J. Bugden, CNLOPB, to J. Long, HMDC (June 7, 2013), *attaching* Hibernia May-December 2012 Board R&D Decisions, at p. MOB0003519 (Ref. # 1\_R&D\_HMDC); **C-212**, Letter from M. Baker, CNLOPB to J. Long, HMDC (May 20, 2014), *attaching* Hibernia 2013 Board R&D Decisions, at p. MOB0003651 (Ref. # 1\_R&D\_HMDC); **C-192**, Letter from M. Baker, CNLOPB, to J. Long, HMDC (June 1, 2015), *attaching* Hibernia 2014 Board R&D Decisions, at p. MOB0003283 (Ref. # 1\_R&D\_HMDC); **C-251**, Letter from M. Baker, CNLOPB, to J. Long, HMDC (July 3, 2015), *attaching* Hibernia Board R&D Decisions for January 1, 2015 – April 30, 2015, at p. MOB0004911 (Ref. # 2\_R&D\_HMDC); **C-384**, Letter from M. Baker, CNLOPB, to **J.** Long, HMDC (June 28, 2016), *attaching* Hibernia May-December 2015 &D and E&T Expenditure Spreadsheets and Eligibility Determinations, at Appendix A, Ref. # 2\_R&D\_HMDC.

<sup>460</sup> **R-147**, *Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada* (ICSID Case No. ARB(AF)/07/4), Witness Statement of Ryan Noseworthy dated November 30, 2012, at ¶¶ 19-34; **CW-5**, First Witness Statement of Ryan Noseworthy, at ¶¶ 19-25.

<sup>&</sup>lt;sup>458</sup> See paragraph 3, above.

<sup>&</sup>lt;sup>461</sup> Counter Memorial Appendix A, at A-35.

However, if Canada means to assert that HMDC did not make any further expenditures on MUN's EOR laboratory during the Hibernia claim period in this arbitration, then this assertion would not be correct. HMDC paid over to MUN during the claim period between May 1, 2012 and December 31, 2015 for the EOR laboratory.<sup>462</sup> HMDC incurred additional costs relating to the WAG Pilot, as well. I understand by Mr. Noseworthy's testimony that none of these costs would have been incurred but for the Guidelines, either.

<sup>&</sup>lt;sup>462</sup> **C-386**, HMDC, 2012 Project Timesheet for Gas Utilization Study (showing for Memorial University in May-December 2012); **C-387**, HMDC, 2013 Project Timesheet for Gas Utilization Study (showing for Memorial University in calendar year 2013); **C-388**, HMDC, 2015 Project Timesheet for Gas Utilization Study (showing for MUN Lab and Experiments in calendar year 2015).

### 27. Geophysics Support (\$1,980,000)

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 87-88

In 2013, upon MUN's proposal, HMDC gave \$1.98 million to support MUN's degree programs in geophysics.<sup>463</sup> The contribution's purposes included the purchase of new field and computational equipment, hosting guest speakers, and funding post-doctoral fellowships and graduate student stipends.<sup>464</sup>

HMDC would not have donated \$1.98 million to support the MUN geophysics program in the absence of the Guidelines. The field and computational equipment purchased with this funding belongs to the university, not HMDC or the Hibernia owners. Moreover, HMDC does not set the academic priorities of the geophysics program, nor does it direct the research by post-doctoral researchers or graduate students. In fact, I understand that the current MUN geophysics curriculum is largely irrelevant to the needs of the oil and gas industry.

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a donation to Memorial University in support of geophysics degree programs. The Claimant alleges that this expenditure is compensable because HMDC does not own the equipment purchased with the funding or set the academic priorities for the Geophysics program.<sup>465</sup> The documents, however, show that HMDC valued receipt of positive recognition for this contribution and

HMDC issues a press release and received press coverage and public gratitude from the University Vice-President for this

<sup>463</sup> **C-212**, Hibernia 2013 Board R&D Decisions, Appendix B.

<sup>464</sup> **C-267**, Letter from **C-267**, Letter from **C-267**, HMDC, to J. Bugden, HMDC (June 19, 2013), *attaching* Memorial University Geophysics Support R&D Work Expenditure Application Form.

<sup>465</sup> **CW-3**, Sampath Statement I ¶¶ 81, 88.

<sup>466</sup> **R-150**, Letter of Agreement between MUN and HMDC for the Hibernia Project Geophysics Support Fund (Sep. 23, 2013), p. MICI 0002629.

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expenditure.<sup>467</sup> Further, HMDC made this expenditure in the interest of its future employees. As stated by Jamie Long, HMDC's President: "HMDC's contribution reflects our ongoing strong support for Memorial University's geoscience teaching and research program. The university is educating some of our future employees, and collaboration between industry and academia is enhancing the province's geophysical expertise."<sup>468</sup> Similarly, other documents produced by the Claimant note that "MUN [Memorial University] has provided much of the east coast industry's human capital in this area of expertise"<sup>469</sup> and that

<sup>470</sup> The research supported is also
connected to other research supported by HMDC. Specifically, documents note
that there is
Canadian taxpayers should not
be required to compensate the Claimant for contributing to the local community
and taking credit for it. The Claimant has a long-standing commitment in the

and taking credit for it. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to

<sup>468</sup> **R-154**, Memorial University News Article, "Hibernia to bolster geophysics program at Memorial" (Jan. 31, 2014). Available at: <u>http://today.mun.ca/news.php?id=8809</u>.

<sup>469</sup> C-267, Letter from **C-267**, HMDC to J. Bugden, HMDC attaching Memorial University Geophysics Support R&D Work Expenditure Application Form (Jun. 19, 2013), p. MOB0005046.

 $^{470}$  R-155, EMC R&D Screening Committee Presentation (Mar. 4, 2013), slide 12 (p. MICI 0004733).

<sup>471</sup> *Ibid*.

<sup>&</sup>lt;sup>467</sup> **R-151**, Hibernia News Release, "Hibernia support to bolster geophysics program at Memorial University" (Jan. 31, 2014). Available at: http://www.hibernia.ca/news/2014/geo.pdf; R-152, CBC News Article, "\$1.98M Hibernia fund donated to Memorial University" (Feb. 2, 2014). Available at: http://www.cbc.ca/news/canada/newfoundland-labrador/1-98m-hibernia-fund- donated-to-memorialuniversity-1.2519857; R-153, The Telegram News Article, "Community Heroes: MUN Earth Sciences receives \$1.98M from HMDC" (Feb. 3. 2014). Available at: http://www.thetelegram.com/Community/2014-02-03/article-3600973/Community-Heroes%3A-MUN-Earth-Sciences-receives-\$1.98M-from-HMDC/1.

the Canadian offshore environment."<sup>472</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have provided this community contribution of \$1.98 million to support Memorial University's Geophysics program. Indeed, in the Mobil I Arbitration, Canada did not even challenge the vast majority of the community contributions, which the Mobil I Majority awarded.<sup>473</sup> This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>474</sup>

Before the enforcement of the Guidelines, HMDC did not make community contributions of this magnitude. Mr. Sampath's additional testimony in his second witness statement only reinforces the conclusion that this \$1.98 million community contribution—in addition to the millions of dollars in other community contributions claimed in this proceeding—is incremental.

### **CW-10**, Sampath Statement II ¶ 104

Canada appears to argue that HMDC donated almost \$2 million to MUN's Geophysics department in exchange for its gratitude.<sup>475</sup> But donations of this magnitude are clearly not done for this purpose, but rather to help the Hibernia project make sufficient spending under the Guidelines. Moreover, this expenditure was not made "in the interests of [HMDC's] future employees",<sup>476</sup> for the reasons given in my first witness statement at paragraphs 82 through 83. I also disagree with suggestions that the potential for future collaboration opportunities with the

<sup>476</sup> Id.

<sup>&</sup>lt;sup>472</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>473</sup> C-2, Mobil I Award ¶ 128-129 & n.62 (noting that Canada accepted the compensability of claimed community contributions and awarding them as incremental expenditures).

<sup>&</sup>lt;sup>474</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>475</sup> Counter Memorial Appendix A, at A-37.

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Geophysics department motivated HMDC to make this large contribution.<sup>477</sup> As I noted in my first witness statement, "the current MUN geophysics curriculum is largely irrelevant to the needs of the oil and gas industry."<sup>478</sup>

<sup>&</sup>lt;sup>477</sup> *Id.* at A-38, quoting (**R-155**, EMC R&D Screening Committee Presentation (Mar. 4, 2013), slide 12 (p. MICI 0004733).

<sup>&</sup>lt;sup>478</sup> **CW-3**, Sampath Statement I ¶ 88.

### 28. Girl Quest Camp Fund (

### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 92-93

MUN organizes an annual summer camp program called "Girl Quest," the purpose of which is to promote interest in science and engineering among Junior High girls from across the Province.<sup>479</sup> Through the program, the participants have the opportunity to engage in hands-on workshops, to take industry tours and visits, and to meet faculty and staff at local universities.<sup>480</sup> In the Mobil I arbitration, I understand Canada ultimately did not contest that HMDC's contribution to the Girl Quest fund were incremental expenditures, and the tribunal awarded damages in respect of this contribution.<sup>481</sup>

)

HMDC donated an additional **and to the Girl Quest Camp Fund in 2012**,<sup>482</sup> plus **and to the Girl Quest Camp Fund in 2012**,<sup>484</sup> As with HMDC's first contribution in 2011, these contributions would not have been made in the absence of the Guidelines.

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a donation to Memorial University to promote science and engineering through summer camps at which girls could engage in hands-on workshops, take industry tours and visits, and meet faculty and staff. The Claimant alleges this expenditure is compensable because HMDC would not make such "community contributions" in the absence of the Guidelines.<sup>485</sup> The documents,

<sup>480</sup> *Id*.

<sup>481</sup> **C-2**, Mobil I Award ¶ 128.

<sup>482</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B.

<sup>483</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix B.

<sup>484</sup> **C-216**, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix B.

<sup>485</sup> **CW-3**, Sampath Statement I ¶ 81.

<sup>&</sup>lt;sup>479</sup> **C-270**, Hibernia MUN - Future SET/Girl Quest Camp Fund R&D Work Expenditure Application Form (Nov. 2, 2011).

however, show that HMDC valued receipt of positive recognition for this contribution and

Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that the full extent of this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have provided this community contribution of over **Generation** to fund a summer camp. Indeed, in the Mobil I Arbitration, Canada did not even challenge the vast majority of the community contributions, which the Mobil I Majority awarded.<sup>487</sup> This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>488</sup>

#### CW-10, Sampath Statement II ¶ 107

It appears that Canada's only reason for why this contribution to the Girl Quest Camp Fund might have been done in the ordinary course of business is that HMDC "valued receipt of the positive recognition for this contribution."<sup>489</sup> This is not in fact true, for the reasons discussed at paragraphs 39 through 42 of this statement.<sup>490</sup> Moreover, HMDC did not fund a summer camp like this before implementation of the Guidelines.

<sup>&</sup>lt;sup>486</sup> **R-156**, Letter of Agreement between HMDC and MUN for the Future SET Program (Nov. 28, 2011), p. MICI 0002639.

 $<sup>^{487}</sup>$  C-2, Mobil I Award ¶ 128-129 & n.62 (noting that Canada accepted the compensability of claimed community contributions and awarding them as incremental expenditures).

<sup>&</sup>lt;sup>488</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>489</sup> Counter Memorial Appendix A, at A-38.

<sup>&</sup>lt;sup>490</sup> See also **CW-3**, Sampath Statement I, at ¶¶ 132-133.

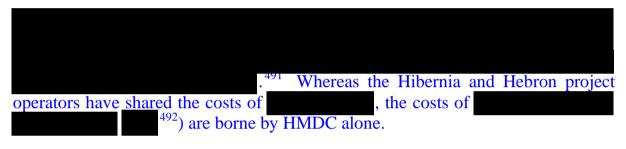
• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

# 29.

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 72-74

The Hebron and Hibernia projects are in the process of implementing a fiber-optic communications system that will link both gravity base structures to the shore. The fiber-optic cable, extending approximately 700 km in length, is expected to enhance the quantity, availability and quality of data transmitted across the Grand Banks region. I understand that in the pending NAFTA arbitration, Mobil does not claim the costs of the main fiber-optic cable.



HMDC would not have borne the costs of **accession** in the absence of the Guidelines. The **accession** will be used exclusively by researchers to gather meteorological and oceanic data for R&D purposes, which would include improving forecasting models. This data will not be needed by HMDC to successfully and safely carry out operations at Hibernia.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

<sup>&</sup>lt;sup>491</sup> C-259, Vision and Strategy for a Grand Banks (undated), at 11; C-260, (undated), at 11; C-

<sup>&</sup>lt;sup>492</sup> C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a that Hebron proposed be added to a to undertake real-time measurement of oceanic and
meteorological conditions. The Claimant alleges this expenditure is compensable
because the will be used exclusively by researchers to gather
meteorological and oceanic data to improver forecasting methods. <sup>493</sup> The
documents, however, show that , <sup>494</sup> and whatever
any present intentions in relation to it are, it will be free to use it as it chooses. In
fact, the expenditure application to the Board notes that the purpose of this
additional was to
Further,
the research is useful
and this is an area of
Additionally, it is unclear why the
cost of this expenditure
Canadian taxpayers should not be required

to compensate the Claimant for this value-added R&D. The Claimant has a longstanding commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to

<sup>493</sup> **CW-3**, Sampath Statement I ¶ 74.

<sup>494</sup> **C-259**, Vision and Strategy for a Grand Banks (Undated), p. 1 (p. MOB0004995).

<sup>495</sup> **C-260**, Installation of Dedicated R&D Work Expenditure Application Form (Sep. 19, 2014).

<sup>496</sup> **C-259**, Vision and Strategy for a Grand Banks (Undated), p. 3 (p. MOB0004997).

<sup>497</sup> *Ibid*, p. 7 (p. MOB0005001).

<sup>498</sup> **CW-3**, Sampath Statement I ¶ 73.

<sup>499</sup> **C-260**, Installation of Dedicated R&D Work Expenditure Application Form (Sep. 19, 2014).

<sup>500</sup> **CW-3**, Sampath Statement I ¶ 72.

solve problems unique to the Canadian offshore environment."<sup>501</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable

### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have paid over **source of source of so** 

### CW-10, Sampath Statement II ¶¶ 90-93

HMDC made this expenditure to to a previously planned will enable researchers to gather met ocean data for R&D purposes, including the improvement of forecasting models. The idea for adding on came out of a workshop organized by a professor at Memorial University of Newfoundland, which was well attended by interested academics and meteorologists.

Canada contends that this expenditure must have been made in the ordinary course of business because and "whatever any present intentions in relation to it are, [HMDC] will be free to use it as it chooses."<sup>504</sup> I do not agree with this contention.

. When HMDC presented this proposal at a meeting with the Board's industrial benefits personnel, which I attended, it pledged to make available only to third-party researchers. Thus, HMDC is not free to use , having

<sup>&</sup>lt;sup>501</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>502</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>503</sup> **CW-3**, Sampath Statement I ¶¶ 72-73.

<sup>&</sup>lt;sup>504</sup> Counter Memorial Appendix A, at A-39.

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made this firm commitment to the Board. The Hebron project will not use , either. Canada quotes from a document stating that the Sob For avoidance of confusion, this use of the term in this instance does not mean an offshore structure like the Hibernia and Hebron GBS platforms, but rather Canada questions why the Hibernia project alone has borne this expenditure, given

Canada questions why the Hibernia project alone has borne this expenditure, given that was proposed by the Hebron project.<sup>506</sup> The explanation is that when it came time to make the actual expenditure,

<sup>505</sup> *Id.* (quoting **C-260**, Installation of Dedicated R&D Work Expenditure Application Form (Sep. 19, 2014)), emphasis added.

<sup>506</sup> Counter Memorial Appendix A, at A-40.

# 30.H<sub>2</sub>S Corrosion and Materials Laboratory and Basic Research on H<sub>2</sub>S Souring (\$3,387,142)

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 99-104

I am aware that since at least 2012, Suncor has undertaken measures to mitigate an issue at the Terra Nova field that is commonly known as "reservoir souring." Reservoir souring of an offshore oil field is caused when seawater is injected to maintain pressure in the reservoir. The injected seawater can stimulate sulfate-reducing bacteria ("SRB") that, in turn, produces hydrogen sulfide ("H<sub>2</sub>S"), which is a toxic and corrosive substance. In severe cases,  $H_2S$  concertation levels can worsen to the point that they force the operator to prematurely shut in and abandon the affected production wells.

At Terra Nova, Suncor initiated a field pilot program to test an  $H_2S$ -mitigation method known as continuous nitrate and batch nitrite injection ("CNNI"). CNNI consists of two components. In the first, nitrates are injected to stimulate nitratereducing bacteria ("NRB"). The NRB propagate and metabolize the available carbon in the oil well, thereby competing with and suppressing the SRB that produce  $H_2S$ . The second component involves injecting nitrites into the reservoir; the injected nitrites react with the rock formation to enable it to absorb the  $H_2S$ , and they also react directly with the  $H_2S$  to lower its concentration.

I believe Suncor would have undertaken the field-oriented aspects of the CNNI program at Terra Nova regardless of the Guidelines. I understand that in the pending NAFTA arbitration, Mobil does not claim compensation for the costs of the CNNI program itself.

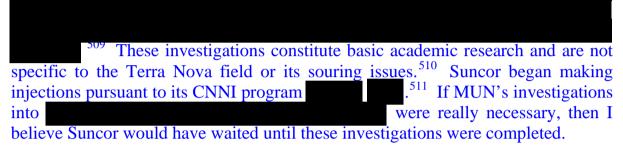
However, Suncor made three contributions in 2013 to expand MUN's research capabilities with regard to  $H_2S$  souring. As I explain below, these contributions were unnecessary to support Suncor's CNNI program or to otherwise address the souring issues at the Terra Nova field.

Suncor donated to MUN to set up a 500 square foot laboratory to test metallic systems used in oil and gas production equipment in sour  $H_2S$  environments.<sup>507</sup> This laboratory duplicates pre-existing facilities, as there are

<sup>&</sup>lt;sup>507</sup> C-230, Terra Nova 2013 Board R&D Decisions, Appendix F; C-273, MUN, Statement of Work: H2S SMaRT Lab (June 4, 2013), at p. 4.

many laboratories in the world that are capable of performing such tests and offer their services to industry. To mention only one example, DNV GL, one of the world's leading classification societies for the offshore oil and gas industry, has a 24,000 square foot facility in Ohio that offers  $H_2S$  corrosion testing.<sup>508</sup> In view of the available world-class alternatives, Suncor would not fund the setup of a small laboratory at MUN lacking proven capabilities, except in the context of having to make Guidelines-eligible expenditures.

In addition to funding the setup of the  $H_2S$  laboratory, Suncor made two additional  $H_2S$ -related contributions to MUN:



# **B.** Appendix A to Canada's Counter Memorial

The H2S Project arises directly out of the specific operational needs of the Terra Nova Project.

resulted in a marked decrease in oil production in 2001 and 2012 at Terra

<sup>508</sup> C-274, DNV GL, http://www.dnvusa.com/resources/laboratory\_facilities/ (undated).

<sup>509</sup> **C-230**, Terra Nova 2013 Board R&D Decisions, Appendix F.

<sup>510</sup> C-275, MUN, Statement of Work: NRB-SRB Interaction and System Optimization: Lab-Scale Investigation during Nitrate/Nitrite Injection for Offshore Reservoir Souring Control (June 4, 2013), at pp. 5-11; C-276, MUN, Statement of Work: Reservoir Souring Sulphur Chemistry in Reservoir (December 3, 2013), at pp. 4-6.

<sup>511</sup> C-277, Suncor Energy Inc., H2S Integrity Team Steering Team Update (April 1, 2014), at p. 5.

<sup>512</sup> **R-71**, Letter from J. Bugden, CNLOPB to **Expenditure**, Suncor Energy attaching R&D Work Expenditure Application Form and Terra Nova R&D Project Abstract: Reservoir Souring: Subsurface Control of H2S and Mitigation Techniques (Nov. 9, 2012), p. 1.

Nova. <sup>513</sup>	According	to	Suncor, thi	s situ	ation	has	
						_	
		• 514	<sup>4</sup> Suncor	states	that		

The Claimant seeks approximately \$0.697 million in damages from Canada for expenditures related to this project. The Claimant has, however, provided no witness from Suncor to provide testimony concerning this project, but relies solely on one of its employees, Mr. Sampath, to opine on what Suncor may or may not have done in the absence of the 2004 Guidelines. In response to Canada's request for documents concerning this expenditure, the Claimant produced only a single document, which was already in Canada's possession because Canada filed it as an exhibit in the Mobil/Murphy arbitration. The Claimant has thus produced <u>no</u> internal documents from Suncor to support the Claimant's position that this expenditure is compensable. Moreover, the documents that Canada does possess concerning this expenditure contradict the opinion of Mr. Sampath and contemporaneous documents carry far greater weight than opinion/hearsay evidence.

First, Mr. Sampath opines that the construction of an H2S research facility by Suncor and Memorial University in Newfoundland ("MUN") "duplicates preexisting facilities" located in Ohio and that MUN researchers lack "proven capabilities."<sup>516</sup> However, Suncor states in documents that

<sup>515</sup> *Ibid*, p. 2.

<sup>516</sup> **CW-3**, Sampath Statement I ¶ 103.

<sup>&</sup>lt;sup>513</sup> **R-157**, The Telegram News Article, "Suncor delays trip to dockyard" (May 4, 2011); **R-158**, The Telegram News Article, "Terra Nova shuts down in September" (Jul. 30, 2011); **R-159**, CBC News Article, "Terra Nova oil production down" (May 4, 2011); **R-160**, Government of Newfoundland website excerpt, "Oil Production Down 26.9% Through First 11 Months of 2012" (Jan. 17, 2013).

<sup>&</sup>lt;sup>514</sup> **R-71**, Letter from J. Bugden, CNLOPB to **Reveal**, Suncor Energy attaching R&D Work Expenditure Application Form and Terra Nova R&D Project Abstract: Reservoir Souring: Subsurface Control of H2S and Mitigation Techniques (Nov. 9, 2012), p. 1:

states:	517	Suncor	also
518			
In light of these statements made by Suncor, Mr. Sampath's of facility at MUN is "duplicative" and that MUN research capabilities" is wrong. Mr. Sampath also opines that two spec- conducted at the H2S facility at MUN are compensable becau	hers l ecific i	ack "pro nvestigat	oven tions
basic academic research and are not specific to the Terra Nova issues." <sup>519</sup> However, the first investigation expressly states that	field	or its sou ationale	iring

second investigation states:

Mr. Sampath's opinion concerning Suncor and these investigations thus conflicts with the documentary evidence and his opinion should be rejected.

<sup>517</sup> **R-71**, Letter from J. Bugden, CNLOPB to **Expenditure**, Suncor Energy attaching R&D Work Expenditure Application Form and Terra Nova R&D Project Abstract: Reservoir Souring: Subsurface Control of H2S and Mitigation Techniques (Nov. 9, 2012), p. 2.

<sup>518</sup> *Ibid*, p. 9

<sup>519</sup> **CW-3**, Sampath Statement I ¶ 104.

<sup>520</sup> C-275, MUN, Statement of Work: NRB-SRB Interaction and System Optimization: Lab-Scale Investigation during Nitrate/Nitrite Injection for Offshore Reservoir Souring Control (Jun. 4, 2013), p. 5 (p. MOB0005109).

<sup>521</sup> **C-276**, MUN, Statement of Work: Reservoir Souring Sulphur Chemistry in Reservoir (Dec. 6, 2013), p. 4 (p. MOB0005127).

Canadian taxpayers should not be required to pay the Claimant for this R&D. Suncor also has a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". <sup>522</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

It is simply a canard to argue that a Suncor representative is needed in order to find that this is an incremental expenditure.<sup>523</sup> Furthermore, in relation to a similar incremental expenditure, the Mobil I Majority found it "significant that a laboratory was constructed to carry out" studies in the Province, even though the operator "apparently has appropriate facilities elsewhere that it could have used for this type of study."<sup>524</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion these contributions to MUN, except perhaps in small part, were incremental expenditures.

# CW-10, Sampath Statement II ¶¶ 114-117

I have decades of experience studying and managing oil reservoirs.<sup>525</sup> Through this experience, I can discern when R&D is necessary to support reservoir management operations and when it is not. Drawing on my substantial experience, I am confident that the expenditures to set up a materials testing laboratory at MUN<sup>526</sup> was unnecessary to support Terra Nova's core CNNI program to control H2S souring.

In disputing my conclusion, Canada quotes from Suncor's pre-approval application to the Board stating that

<sup>526</sup> *Id.* ¶ 103.

<sup>&</sup>lt;sup>522</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

<sup>&</sup>lt;sup>523</sup> Reply Memorial V.C.2.

<sup>&</sup>lt;sup>524</sup> **C-2**, Mobil I Award, ¶ 63.

<sup>&</sup>lt;sup>525</sup> **CW-3**, Sampath Statement I, at ¶¶ 3-5.

527 The same document praises MUN as having To be clear, these statements were made in furtherance of Suncor's effort to secure the Board's preapproval of the overall H2S souring . In actual fact, as I learned from mitigation program, then estimated at <sup>529</sup> Suncor had an existing relationship with , which already had the materials testing equipment and expertise that Suncor might have needed to support the CNNI project. Indeed, Suncor's existing relationship with is noted in the document that Canada references.<sup>530</sup> confirmed that if not for the Guidelines', Suncor would not have set up an essentially duplicate laboratory at MUN since it could have acquired any laboratory assistance it may have needed from As to the MUN studies , I noted in my first witness statement that the proposals for these studies showed that they were generic.<sup>531</sup> agreed that these studies had generic components and, but for the Guidelines, Suncor would not have commissioned them from MUN instead of However. was of the view that Suncor would have commissioned similar studies

in some form from , though their scope and cost would likely have been different.

<sup>528</sup> Id.

<sup>529</sup> See paragraphs 19 through 20, above.

<sup>530</sup> **R-71**, Letter from J. Bugden, CNLOPB to **Reveal**, Suncor Energy attaching R&D Work Expenditure Application Form and Terra Nova R&D Project Abstract: Reservoir Souring: Subsurface Control of H2S and Mitigation Techniques (Nov. 9, 2012), at p. 2

<sup>531</sup> **CW-3**, Sampath Statement I, at  $\P$  104.

<sup>&</sup>lt;sup>527</sup> Counter Memorial Appendix A at A-42 (citing **R-71**, Letter from J. Bugden, CNLOPB to , Suncor Energy attaching R&D Work Expenditure Application Form and Terra Nova R&D Project Abstract: Reservoir Souring: Subsurface Control of H2S and Mitigation Techniques (Nov. 9, 2012)).

Accepting that a portion of these expenditures may have been incurred in the ordinary course, I have reexamined the project proposals, including their cost estimates, to differentiate which cost components are incremental (meaning, Suncor would not have borne them in the absence of the Guidelines) from those cost components that Suncor would have commissioned from the study, <sup>532</sup> I have calculated that of the overall cost of the study, <sup>534</sup> I have calculated that of the overall cost of the calculated that of the overall cost of the study, <sup>535</sup> I have calculated that of the overall cost of the study, <sup>535</sup> I have calculated that of the overall cost of the study, <sup>535</sup> I have calculated that of the overall cost of the study, <sup>535</sup> I have calculated that of the overall cost of the study, <sup>535</sup> I have calculated that of the overall cost of the study, <sup>536</sup> I have calculated that of the overall cost of the study, <sup>536</sup> I have calculated that of the overall cost of the study, <sup>536</sup> I have calculated that of the overall cost of the studies at a study of the studies at a study over the studies at a study over the studies of the studies at a study over the studies of these expenditures that I have concluded would not have been included in the studies at a study over the studies of these expenditures.

<sup>&</sup>lt;sup>532</sup> C-275, MUN, Statement of Work: NRB-SRB Interaction and System Optimization: Lab-Scale Investigation during Nitrate/Nitrite Injection for Offshore Reservoir Souring Control (Jun. 4, 2013).

<sup>&</sup>lt;sup>533</sup> **C-366**, K. Sampath, Estimation of incremental and 'ordinary course' expenditures (Undated), at p. 1.

<sup>&</sup>lt;sup>534</sup> **C-276**, MUN, Statement of Work: Reservoir Souring Sulphur Chemistry in Reservoir (Dec. 6, 2013).

 $<sup>^{535}</sup>$  C-366, K. Sampath, Estimation of incremental and 'ordinary course' expenditures (Undated), at p. 2.

# 31.

# A. First Witness Statement(s)

# CW-1, Phelan Statement I ¶ 35

My colleague Andrew Ringvee, who was responsible for the R&D file at HMDC until July 2010, led the initial effort at Hibernia to identify opportunities to close the gap between our obligations under the Guidelines and the baseline level of R&D that would be undertaken in the ordinary course of business. He was also responsible for identifying R&D and E&T activities that the Board would approve as eligible for credit under the Guidelines. A formal position was created at Hibernia during Andrew Ringvee's tenure to manage Hibernia's R&D obligations under the Guidelines. In August 2010, and additional assistance was required from took over this role in July 2010, and additional assistance was required from took over this role in the served until his retirement at the end of January 2016. Suncor created a similar position to manage Terra Nova's activities relating to the Guidelines, as well.

# **CW-4**, Ringvee Statement I ¶ 4, ¶¶ 8-9, ¶ 18

In September 2008, while in the Terra Nova Joint Interest Advisor and Asset Team Lead role, I was assigned responsibility for EMC's research and development ("R&D") file. After the Canadian courts dismissed the legal challenge to the 2004 Guidelines for Research and Development Expenditures (the "Guidelines") in February 2009, the R&D file expanded substantially. In September 2009, my Terra Nova role was reassigned so I could focus exclusively on the R&D file, which included responsibility for developing a work plan for meeting our spending requirements under the Guidelines.

• • • •

Prior to September 2008, the previous R&D file manager had mostly coordinated EMC's participation in the Research Advisory Committee for Petroleum Research Atlantic Canada ("PRAC"), a membership organization that funded and facilitated petroleum-related research in Atlantic Canada. Occasionally, my predecessor also consulted with industry groups or with research institutes looking for industry input. The R&D file was a relatively minor part of his responsibilities.

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In September 2008, when I was first assigned to the EMC R&D file, the R&D file was also a relatively minor part of my responsibilities. At that time, my main focus was representing EMC's interests at Terra Nova,<sup>536</sup> and the R&D file did not include responsibility for planning or monitoring R&D activities undertaken by properties in which EMC had an interest, such as Hibernia and Terra Nova.

. . . .

Over the course of 2009, the work involved in managing EMC's R&D file grew significantly as a result of my ongoing involvement with the R&D Task Force and coordination of the industry's efforts to comply with the Guidelines. In September 2009, my Terra Nova responsibilities were reassigned so I could focus exclusively on the R&D file. Other EMC employees also worked with me on the R&D issue: Paul Phelan, our Accounting Manager, and Rod Hutchings, our Tax Advisor, coordinated Hibernia Management Development Company Ltd.'s ("HMDC")<sup>537</sup> response to the Board's inquiries pertaining to actual Hibernia historical R&D expenditures and attended meetings with the Board on HMDC's behalf. In February 2010, we added another engineer, to the commercial organization to assist us with the R&D file.

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to the cost of a
. The Claimant alleges this expenditure is
compensable because it would not have been necessary to
in the absence of the
Guidelines. However, the Claimant has not provided any explanation or
documentary breakdown supporting the amount claimed, and it is unclear if
includes any responsibilities in relation to ordinary course R&D
and E&T expenditures. The Claimant has failed to prove with reasonable certainty
that this expenditure is compensable.

<sup>&</sup>lt;sup>536</sup> See supra ¶¶ 3-4.

<sup>&</sup>lt;sup>537</sup> HMDC is the operator of the Hibernia project.

<sup>&</sup>lt;sup>538</sup> **CW-1**, Phelan Statement I ¶ 35.

# C. Mobil's Response And Further Witness Testimony

The incremental nature of costs is *res judicata* and cannot be questioned in this proceeding. In the Mobil I Arbitration, Canada accepted that Mobil "provided sufficient evidence" that this community contribution was incremental. <sup>539</sup> The Mobil I Majority decided that this expenditure was incremental based on Canada's acceptance. <sup>540</sup> Canada does not address its prior acceptance, much less does it dispute the Mobil I Majority's final disposition on the incremental nature of the costs.

While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Phelan's and Mr. Sampath's responses to Canada's comments in their second witness statements, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-9, Phelan Statement II ¶¶ 91-92

I understand that Canada challenges Mobil's claim in respect of the costs incurred by HMDC.<sup>541</sup> These costs represent the salary and benefits paid to the individuals who have occupied or assisted the R&D Manager role at HMDC, including Messrs. A substantiation of the statement, this role was created to manage and to comply with HMDC's R&D obligations under the Guidelines after the Board began enforcing them.<sup>542</sup> Indeed, in a document produced by Canada in this arbitration, the Board acknowledges that there is a significant administrative burden in having to manage these types of obligations.<sup>543</sup> Mobil, as an investor in the Hibernia project, would not have incurred the Guidelines.

<sup>&</sup>lt;sup>539</sup> C-389, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Canada's Rejoinder on Damages (January 25, 2013, at ¶ 123 n.267. See also C-390, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Second Post-Hearing Report of Richard E. Walck (January 25, 2013), Annex I, at p. 7.

<sup>&</sup>lt;sup>540</sup> **C-2**, Mobil I Award ¶¶ 128-129 & n. 162.

<sup>&</sup>lt;sup>541</sup> Counter Memorial Appendix A, at A-43 to A-44.

<sup>&</sup>lt;sup>542</sup> **CW-1**, Phelan Statement I,  $\P$  35.

<sup>&</sup>lt;sup>543</sup> **C-382**, C-NLOPB, Memorandum to the Board (Subject: Decision Item R&D Obligations – Dealing with Current and Go Forward Shortfalls), at p. 4.

A total of **Constant** in costs associated with the R&D Manager position were reported to the Board by HMDC in the 2014 Hibernia R&D/E&T expenditure report, and the Board credited these costs as eligible under the Guidelines.<sup>544</sup> This total amount was incurred between 2011 and 2014. Because Mobil's claim in this arbitration with respect to Hibernia expenditures starts on May 1, 2012, I received a breakdown of these costs covering the period from that date through December 31, 2014, which is **Constant**. Mobil basis its claim for R&D Manager costs on this figure. Mobil claimed and received compensation for these types of costs in the Mobil I Arbitration.<sup>545</sup>

#### CW-10, Sampath Statement II ¶¶ 142-143

Canada has challenged the costs incurred by HMDC and charged to the Hibernia project owners for between the selary and benefits when I served as HMDC's R&D Manager and the salary and benefits of my predecessor, between and another HMDC staff member, between the selary and benefits of I raise it in this statement to address Canada's comment that "it is unclear if the position created includes any responsibilities in relation to ordinary course R&D and E&T expenditures."<sup>547</sup>

When I was applying for the R&D Manager position, it was made very clear to me that I would not get directly involved in HMDC's normal operations. This in fact turned out to be the case, as the R&D Manager position was dedicated to enabling HMDC to comply with the R&D and E&T spending obligations under the Guidelines. To meet this objective, I had to develop new R&D and E&T projects that HMDC could fund in the Province. My job was dedicated to developing, planning, and overseeing HMDC's participation in non-essential R&D and E&T projects whose purpose was to help the Hibernia project to comply with expenditure obligations under the Guidelines. Other than compiling information about "ordinary course" expenditures into Hibernia's annual R&D and E&T reports to the Board, I had no involvement with HMDC's "ordinary course" R&D and E&T activities.

<sup>&</sup>lt;sup>544</sup> **C-192**, Letter from M. Baker, CNLOPB, to J. Long, HMDC, *attaching* Hibernia 2014 Board R&D Decisions, June 1, 2015, at MOB0003285.

 $<sup>^{545}</sup>$  **R-69**, Mobil I Fourth Witness Statement of Paul Phelan, at Annex D, p. 2 (Ref. # 10\_R&D\_HMDC); C-2, Mobil I Award, ¶ 128 & n.162.

<sup>&</sup>lt;sup>546</sup> Counter Memorial Appendix A, at A-43 to A-44.

<sup>&</sup>lt;sup>547</sup> *Id.* at A-44.

# 32.Ice Gouge Study (

# A. First Witness Statement(s)

## CW-3, Sampath Statement I ¶¶ 42-43

In 2011 the operators of the Hibernia, Terra Nova, and projects funded a multi-phase JIP known as the Ice Gouge Study to investigate the establishment of a permanent large scale gouge test facility in Newfoundland, which would allow for measurement of pipeline deformation during ice gouging events.<sup>548</sup> The Mobil I tribunal concluded that the Ice Gouge Study would not have been funded in the ordinary course of business, and it awarded damages in respect of it.<sup>549</sup>\_The study continued after 2011, with HMDC spending in 2013<sup>550</sup> and Suncor spending that same year.<sup>551</sup> Also, in 2015, HMDC made a related contribution of \_\_\_\_\_\_.

)

If the Ice Gouge Study were required for the Hibernia and Terra Nova projects, I believe it would have been conducted long ago. As part of their initial development, systems were implemented to protect their pipeline and flowline systems from the risks of ice gouging. If they had not done so, it is difficult to see how they could have operated safely over the years. Moreover, I consider it unlikely that the respective project operators would reengineer their existing systems based on any results coming out of this JIP.

• See also CW-3, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

<sup>&</sup>lt;sup>548</sup> **C-243**, Letter from W. Swett, HMDC, to J. Bugden, CNLOPB, *attaching* Hibernia Proposal to Study the Magnitude and Parameters that affect Subgouge Displacements for the Design of Buried Submarine Pipelines in Cold Regions R&D Work Expenditure Form (May 12, 2011); **C-244**, Suncor Annual Canada-Newfoundland and Labrador Benefits Report 2011, at p. 22 (Mar. 28, 2012).

<sup>&</sup>lt;sup>549</sup> **C-2**, Mobil I Award ¶¶ 113-115.

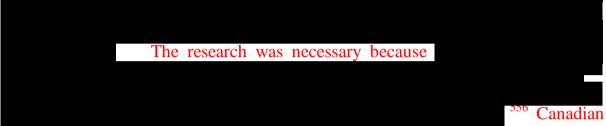
<sup>&</sup>lt;sup>550</sup> C-212, Hibernia 2013 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>551</sup> C-230, Terra Nova 2013 Board R&D Decisions, Appendix F.

<sup>&</sup>lt;sup>552</sup> **C-245**, HMDC, Corrections to R&D and E&T Expenditures in 2014 and January-April 2015, Appendix A (reflecting for "Trenching Assessment (Amendment to Gouging Project)").

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a large-scale test database to define and understand the parameters that affect sub-gouge displacements, in order to advance the state of design for buried submarine pipelines installed in cold regions. The Claimant alleges that this expenditure is compensable because if the study were relevant to the Hibernia and Terra Nova projects, it would have been conducted long ago.<sup>553</sup> The documents, however, confirm that the research is highly relevant not just to the Hibernia and Terra Nova projects, but to all



taxpayers should not be required to compensate the Claimant for research which is clearly highly relevant to Claimant's operations at Hibernia and Terra Nova, and in the Arctic, which by its own admission is

. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasures...to minimize oil spills from ALPs and subsea components due to iceberg impact."<sup>557</sup> and a long-standing commitment in the Terra Nova

<sup>555</sup> **C-243**, Letter from **Control**, HMDC to J. Bugden, CNLOPB attaching Hibernia Proposal to Study the Magnitude and Parameters that affect Subgouge Displacements for the Design of Buried Submarine Pipelines in Cold Regions R&D Work Expenditure Application Form (May 12, 2011), p. 2 (p. MOB0004707).

<sup>556</sup> **R-161**, EMC R&D Screening Committee Presentation (Mar. 17, 2011), slide 10 (p. MICI 0004595).

<sup>557</sup> C-37, Hibernia Decision 86.01, p. 83, (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

<sup>&</sup>lt;sup>553</sup> **CW-3**, Sampath Statement I  $\P$  42.

<sup>&</sup>lt;sup>554</sup> C-243, Letter from **December**, HMDC to J. Bugden, CNLOPB attaching Hibernia Proposal to Study the Magnitude and Parameters that affect Subgouge Displacements for the Design of Buried Submarine Pipelines in Cold Regions R&D Work Expenditure Application Form (May 12, 2011), p. 1 (p. MOB0004706).

Benefits Plan to continue "funding basic research".<sup>558</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

## C. Mobil's Response And Further Witness Testimony

In relation to a similar incremental R&D expenditure, the Mobil I Majority recognized that "the serious nature of pipeline damage" shows that this type of research "would have been undertaken earlier were it important."<sup>559</sup> The Mobil I Majority further found significant the fact that the Hibernia and Terra Nova projects "already have systems to address pipeline damage."<sup>560</sup>

These considerations align with Mr. Sampath's observation in his first witness statement that "Hibernia's systems to protect its subsea equipment from ice scour have proved satisfactory for over two decades without the need for additional research."<sup>561</sup> His additional comments on this expenditure, copied below, further reinforce his conclusion the Ice Gouge Study would not have been funded in the ordinary course of business.

# CW-10, Sampath Statement II ¶¶ 64-65

This JIP came out of a PRNL workshop organized to help local industry brainstorm Guidelines-eligible projects.<sup>562</sup> Canada contends that this project to investigate the establishment of a permanent large scale gouge test facility was "highly relevant" to the Hibernia and Terra Nova projects.<sup>563</sup> This is not accurate. As I explained in my first witness statement, the Hibernia and Terra Nova projects most likely will not reengineer their existing pipeline systems based on this study.<sup>564</sup>

<sup>560</sup> Id.

<sup>&</sup>lt;sup>558</sup> C-41, Terra Nova Decision 97.01, p. 23.

<sup>&</sup>lt;sup>559</sup> **C-2**, Mobil I Award ¶ 115.

<sup>&</sup>lt;sup>561</sup> CW-3, Sampath Statement I ¶ 45.

<sup>&</sup>lt;sup>562</sup> C-364, PRAC, Ice Management Program SME Workshop August 17, 2011 (Undated), at p. 15.

<sup>&</sup>lt;sup>563</sup> Counter Memorial Appendix A, at A-45.

<sup>&</sup>lt;sup>564</sup> **CW-3**, Sampath Statement I  $\P$  43.

Canada also suggests that the research might be relevant to future developments in sea ice-prone regions.<sup>565</sup> I do not disagree that improved knowledge about ice gouge risks to subsea pipelines could inform design criteria for future pipeline systems in certain regions. However, these benefits would not have caused the Hibernia or Terra Nova operators to contribute to this JIP.<sup>566</sup> Moreover, the development of an ice gouge facility that is equally available the entire industry is not something that ExxonMobil affiliates would accept in the ordinary course of business.<sup>567</sup> In effect, through its contribution to this JIP, Mobil has paid for the design of a facility that could assist its competitors who are interested in developing future projects in sea ice regions.

- See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)
- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>&</sup>lt;sup>565</sup> Counter Memorial Appendix A, A-44 to A-45.

<sup>&</sup>lt;sup>566</sup> See paragraphs 22 through 26, above.

<sup>&</sup>lt;sup>567</sup> See paragraphs 27 through 31, above.

#### 33. Ice Loads on Floating Structures (

)

## A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 34-54

This JIP was intended to improve and validate existing methods and tools used to design and operate floating structures and vessels in pack ice conditions.<sup>568</sup> The results could lead to better definition of design requirements for future projects.

In 2012 HMDC for Hibernia and Suncor for Terra Nova each contributed to fund the Ice Loads on Floating Structures JIP.<sup>569</sup> I understand that Husky, as the White Rose operator, and that Chevron, a non-operator, also participated in and funded this JIP.<sup>570</sup> In theory, the results could help future projects, insofar that better knowledge about pack ice loads may inform the design requirements of floating systems in regions prone to such conditions. But I do not see how this project would help existing projects like Hibernia and Terra Nova. What is more, the Hibernia project is operated not from a floating structure, but rather a gravity base structure, making this JIP especially irrelevant to it.

• See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a project intended to improve understanding of global ice loads in order to meet the design requirements of floating structures. The Claimant alleges that this expenditure is compensable because there was no need

<sup>&</sup>lt;sup>568</sup> **C-235**, PRNL, Contribution Agreement regarding the Project "Ice Loads on Floating Structures – Phase 1" dated November 9, 2012, Annex B.

<sup>&</sup>lt;sup>569</sup> C-206, Hibernia May-December 2012 Board R&D Decisions, Appendix A; C-207, Terra Nova 2012 Board R&D Decisions, Appendix F.

<sup>&</sup>lt;sup>570</sup> **C-235**, PRNL, Contribution Agreement regarding the Project "Ice Loads on Floating Structures – Phase 1" dated November 9, 2012.

for the program at Hibernia or Terra Nova.<sup>571</sup> The documents, however, state that



.<sup>573</sup> It also would resolve the uncertainty on pack ice loads on floating structures, such as Terra Nova. Canadian taxpayers should not be required to compensate the Claimant for the acquisition of knowledge that it can apply to future arctic offshore operations, which by its own admission is an important area.<sup>574</sup> The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported",<sup>575</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research" and undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of even low-lying masses of floating ice."<sup>576</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants'

<sup>571</sup> **CW-3**, Sampath Statement I ¶ 35.

<sup>572</sup> **C-235**, PRNL, Contribution Agreement for "Ice Loads on Floating Structures – Phase 1" (Nov. 9, 2012), p. A-1 (p. MOB0004560).

<sup>573</sup> **R-121**, EMC R&D Screening Committee Presentation (Nov. 16, 2012), p. MICI 0004715.

<sup>574</sup> **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003215.

<sup>575</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>576</sup> C-41, Terra Nova Decision 97.01, pp. 23, 47.

assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>577</sup>

In addition, PRNL was designated to manage this JIP.<sup>578</sup> This fact further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>579</sup>

Mr. Sampath's further observations about this expenditure, copied below, reinforce the conclusion that the Hibernia and Terra Nova operators would not have funded this JIP in the ordinary course of business.

#### CW-10, Sampath Statement II ¶¶ 55-56

This project was identified at a PRNL workshop in late 2009, whose purpose was to help the local industry identify areas of research that it could jointly fund in order to meet the spending requirements of the Guidelines. <sup>580</sup> Contrary to Canada's suggestion, <sup>581</sup> the potential application of this research to separate or future offshore projects would not have justified this expenditure in the absence of the Guidelines, for the reasons given at paragraphs 22 to 26 of this statement. Moreover, I am not aware of any current or future projects

that could take advantage of this research.

I take exception to Canada's assertion that this project "would resolve the uncertainty on pack ice loads on floating structures, such as Terra Nova."<sup>582</sup> Pack ice rarely extends far beyond the shoreline, and thus would not extend to the Terra

<sup>577</sup> **C-2**, Mobil I Award ¶ 67.

<sup>579</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>580</sup> **C-235**, PRNL, Contribution Agreement for "Ice Loads on Floating Structures – Phase 1" (Nov. 9, 2012), at MOB0004560 to MOB0004561.

<sup>582</sup> *Id.* at A-46.

<sup>&</sup>lt;sup>578</sup> **C-262**, Letter from **Control**, HMDC, to J. Bugden, CNLOPB, attaching Arctic and Cold Climate Oil Spill Response Research Facility R&D Work Expenditure Application Form (November 19, 2012), at p. MOB0005009.

<sup>&</sup>lt;sup>581</sup> Counter Memorial Appendix A, at A-21 to A-22.

Nova FPSO, which is located more than 300 kilometers from the shoreline. Moreover, being an FPSO, Terra Nova can disconnect from the subsea lines and float away from approaching ice threats.

• See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

# 34.

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶¶ 58-59

This project consists of two distinct phases. The first phase relates to
. To address this, a series of model tests were conducted
. The second phase relates to
understanding the . For this phase,
for experimentation. <sup>584</sup> HMDC
contributed to this two-part study in 2014, and it incurred an additional
in costs for subject matter expertise. <sup>585</sup>
HMDC would not have funded this study in the ordinary course of business. The expected benefits of the first phase,
would be to support future decisions on when and how This is not a problem that the Hibernia
would be to support future decisions on when and how This is not a problem that the Hibernia gravity base structure faces, given that it is fixed in its present location. Similarly,
would be to support future decisions on when and how This is not a problem that the Hibernia gravity base structure faces, given that it is fixed in its present location. Similarly, the second phase concerning has little conceivable application
would be to support future decisions on when and how This is not a problem that the Hibernia gravity base structure faces, given that it is fixed in its present location. Similarly, the second phase concerning has little conceivable application to Hibernia, as the purpose of this phase is
would be to support future decisions on when and how This is not a problem that the Hibernia gravity base structure faces, given that it is fixed in its present location. Similarly, the second phase concerning has little conceivable application

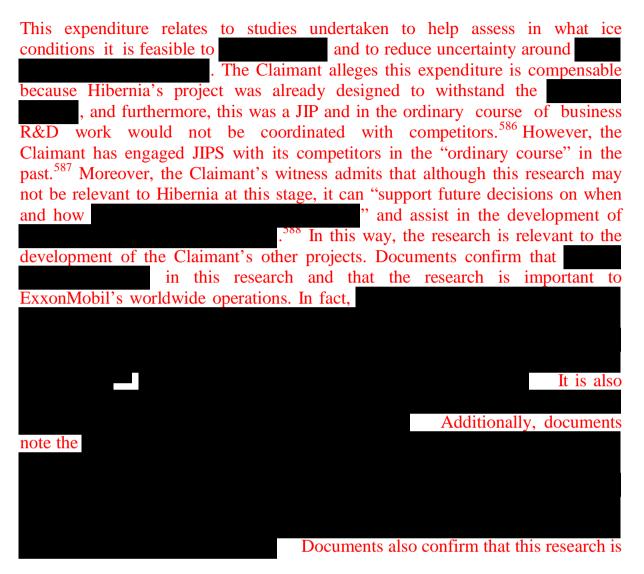
• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

<sup>584</sup> *Id*.

<sup>&</sup>lt;sup>583</sup> **C-253**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (February 26, 2014), *attaching* Ice Loads on Towed Structures & Ridge Testing Capability Assessment R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>585</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A; **C-245**, HMDC, Corrections to R&D and E&T Expenditures in 2014 and January-April 2015, Appendix A.

# **B.** Appendix A to Canada's Counter Memorial



- <sup>586</sup> **CW-5**, Noseworthy Statement I ¶ 26-28.
- <sup>587</sup> **C-2**, Mobil/Murphy Award ¶¶ 106-109.
- <sup>588</sup> **CW-3**, Sampath Statement I  $\P$  59.

<sup>589</sup> C-253. Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching Ice

R&D Work Expenditure Application

Form (Feb. 26, 2014), p. MOB0004923.

- <sup>590</sup> *Ibid*, p. MOB0004924.
- <sup>591</sup> *Ibid*, p. MOB0004925.

necessary:

<sup>593</sup> Canadian taxpayers should not be required to pay for the Claimant's value-added R&D. The Claimant has a longstanding commitment in the Hibernia Benefits Plan to "promote further research and development in Canada to solve problems unique to the Canadian offshore environment" and for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken". <sup>594</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>595</sup> Mr. Sampath's further observations about this expenditure, copied below, reinforce the conclusion that the Hibernia and Terra Nova operators would not have funded this JIP in the ordinary course of business.

# CW-10, Sampath Statement II ¶¶ 76-78

This was a JIP to . Canada notes that Mobil has engaged in JIPs in the past. But as discussed at paragraph 28 of this statement, company-to-company JIPs are not especially uncommon when the participants make equal contributions in exchange for their equal access to the results. Conversely,

<sup>592</sup> *Ibid*.

<sup>593</sup> C-253, Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching Ice Loads on Towed Structures & Ridge Testing Capability Assessment R&D Work Expenditure Application Form (Feb. 26, 2014), p. MOB0004927.

<sup>594</sup> **C-37**, Hibernia Decision 86.01, pp. 25, 82.

<sup>595</sup> **C-2**, Mobil I Award ¶ 67.

<sup>596</sup> *Id.* at A-47.

project-to-project JIPs like this are unusual, given that the projects' owners are making financial contributions in unequal measure yet have equal access to the results.

Moreover, it is not correct that			
as Canada contends.	For this pro	oposition, Can	ada the pre-approval
application to the Board,			. <sup>598</sup> This is
another instance of a vendor confu	sing		, as discussed at
paragraphs 43 through 44 of this	statement.	Moreover, the	e actual contribution
agreement makes clear that the cor	ntributing pa	rticipants	

Contrary to Canada's suggestion,<sup>600</sup> with this R&D project does not signify that it would have been funded in the ordinary course of business, as I explain at paragraphs 27 through 31 of this statement. In addition, the potential for applying the knowledge gained by this research to future projects in which projects may have an interest would not have justified this expenditure, as explained in paragraphs 22 through 26 of this statement.

- See also CW-10, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)
- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>&</sup>lt;sup>597</sup> *Id.* at A-47 to A-48.

<sup>&</sup>lt;sup>598</sup> *Id.* (citing **C-253**. Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching Ice Loads on Towed Structures & Ridge Testing Capability Assessment R&D Work Expenditure Application Form (Feb. 26, 2014), p. MOB0004925).

<sup>&</sup>lt;sup>599</sup> C-365, PRNL, Contribution Agreement Regarding Towing Icebergs in Sea Ice – Project C – Phase 1 (April 5, 2013), at Annex C Property/Intellectual Property and Confidentiality, at  $\P$  2. See also paragraphs 27 through 31, above.

<sup>&</sup>lt;sup>600</sup> Counter Memorial Appendix A, at A-47.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

35.Ice Management JIP (

#### )

## A. First Witness Statement(s)

#### CW-5, Noseworthy Statement I ¶¶ 26-27

In late 2009, I took part in several meetings related to the Arctic in my capacity as Technical Lead for Hebron (Andrew Ringvee attended for Hibernia and

from Suncor Energy Inc. ("Suncor"), for Terra Nova). As a result of these meetings, we decided to pursue a JIP program to develop an improved ice management system. The JIPs were initiated in 2011; the initial phases simply involved developing the program itself, performing some analysis, and setting priorities.<sup>601</sup> The work has been largely undertaken by local researchers, masters students, and work-term students. HMDC and ExxonMobil simply would not have become involved in these studies or funded them in the ordinary course of business. I believe the same goes for Suncor as the operator of the Terra Nova project.

Hibernia operates from a GBS that was designed to withstand the impact of an iceberg, so ice management simply has been much less of a concern for Hibernia compared to other offshore projects. If the Hibernia project had a need for this large amount of ice-management research, it would have been identified and undertaken during the project's development phase long before 2009. I also believe we have no need to conduct analyses or studies on ice management techniques, nor will we have much (if any) need for any of the resulting technologies, even assuming the JIPs are successful. While Terra Nova is more sensitive to ice-related problems, I understand that in over twenty years of operations, it too has already developed a suitable ice management program. Therefore, I cannot see why Terra Nova would need to take part in these JIPs in the ordinary course of business. Also, the simple fact that this R&D work was undertaken as a series of JIPs indicates that it is incremental. These JIPs were devised in the industry arctic workshop I referenced above;<sup>602</sup> as I also noted there, we do not usually coordinate and work with our competitors to develop R&D in the ordinary course of business. This is because the costs associated with such

<sup>&</sup>lt;sup>601</sup> C-234, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice

Environments: Joint Industry Projects Overview, at p. 4.

<sup>&</sup>lt;sup>602</sup> See C-162, Hibernia Work Plan, at p. 11.

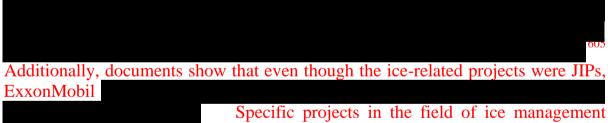
work are only typically justified if the company can retain the intellectual property for itself and use it in future projects.

Because they came out of the ice management workshops I attended, and they are not necessary to successfully operating Hibernia or Terra Nova, I believe that expenditures associated with Ice Management JIPs would not have been incurred by the Hibernia and Terra Nova projects but for the Guidelines. I understand that another individual, Krishnaswamy Sampath, will provide additional evidence regarding specific Ice Management JIPs that were conducted during the periods at issue in the pending arbitration.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a Joint Industry Program that was undertaken to improve safety, efficiency and capacity for operations in Arctic frontier regions. The Claimant alleges this expenditure is compensable because Hibernia's project was already designed to withstand the impact of icebergs, and furthermore, this was a JIP and in the ordinary course of business R&D work would not be coordinated with competitors.<sup>603</sup> However, the Claimant has engaged JIPs with its competitors in the "ordinary course" in the past.<sup>604</sup> Moreover, the documents confirm that



 $^{603}$  CW-5, Noseworthy Statement I ¶¶ 26-28.

<sup>604</sup> **C-2**, Mobil/Murphy – Award ¶¶ 106-109.

<sup>605</sup> **C-234**, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), p. MOB0004520.

<sup>606</sup> Mr. Ringvee states in an email in relation to a suggested ice-related JIP (that is, a ) that the

were	select	ed wi	ith a		to making					
				.607	This researc	h was	necessary	<u>/ because</u>	e	
	This	resea	arch	would						
									609	Anticipated
benef	its in	clude								

Canadian taxpayers should not be

required to pay for the Claimant's value- added R&D. The Claimant has a longstanding commitment in the Hibernia Benefits Plan to "promote further research and development in Canada to solve problems unique to the Canadian offshore environment" and for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken".<sup>611</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

The incremental nature of the Ice Management JIPs is *res judicata* and cannot be questioned in this proceeding. The Mobil I Majority held as follows:

The Majority finds that the Claimants have proven that this expenditure was incremental.

." That JIP was to be excluded because

. **R-162**, E-mail from Andrew Ringvee, ExxonMobil to Ryan Noseworthy et al., ExxonMobil (Mar. 15, 2010), p. MICI 0003451.

<sup>607</sup> **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003234.

<sup>608</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002723

<sup>609</sup> **C-234**, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), p. MOB0004520.

<sup>610</sup> *Ibid*, pp. MOB0004535-4536.

<sup>611</sup> **C-37**, Hibernia Decision 86.01, p. 25, 82.

The Ice Management JIP at issue in these proceedings appears to be far more extensive than previous work focused on ice management, both in terms of scope and costs. Further, additional factors such as that Hibernia's fundamental structure is not susceptible to iceberg impact, and that this project was conceived at a joint industry workshop, lead the Majority to believe that this expenditure is properly characterized as incremental.<sup>612</sup>

Canada does not address, much less dispute, the Mobil I Majority's final disposition on the incremental nature of the Ice Management JIPs. While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Noseworthy's testimony from his first witness statement, copied above, confirm the correctness of the Mobil I Majority's decision.

• See also CW-10, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

<sup>&</sup>lt;sup>612</sup> C-2, Mobil I Award ¶¶ 104-105 (footnotes omitted).

# 36. Ice Ocean Sentinel System (\$300,000)

# A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 105-107

In 2015, MUN led a project to develop an Ice Ocean Sentinel System ("IOSS"), the goal of which is to design, build, field test, and commercialize an unmanned surface craft equipped with an ice detection radar and an underwater scanning sonar.<sup>613</sup> If successful, this craft will be capable of approaching and scanning sea ice and icebergs, measuring environmental conditions, and transmitting the collected data to a remote location.

I understand that the majority of the financing for the IOSS project came from government sources (including the Atlantic Innovation Fund, the Natural Sciences and Engineering Research Council of Canada, and the Department of Innovation, Business and Rural Development of Newfoundland and Labrador).<sup>614</sup> In addition, Suncor committed to provide \$500,000 from the Terra Nova project account toward the project.<sup>615</sup> Based on invoices I have reviewed, I understand that Suncor has provided \$300,000 of this amount through 2015.<sup>616</sup>

The IOSS concept is unnecessary for safe and successful operations at Terra Nova. The FPSO has onboard technologies capable of detecting approaching hazards, including icebergs. Moreover, MUN, not Suncor, is leading the IOSS project, with government providing most of the funding. It appears that the most significant aspect of Suncor's involvement is the expenditure of Terra Nova account funds. Suncor would not ordinarily apply project funds to a university-led project that is otherwise funded by government.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra

<sup>614</sup> *Id.* at p. 84.

<sup>615</sup> Id.

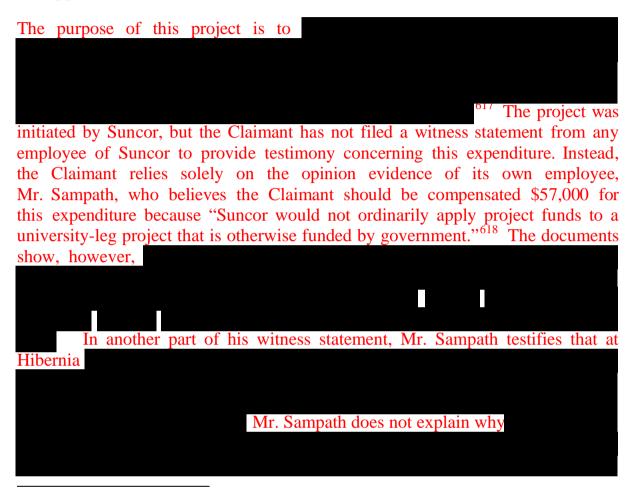
<sup>&</sup>lt;sup>613</sup> C-278, MUN, IOSS Statement of Work and Budget, at pp. 19-20.

<sup>&</sup>lt;sup>616</sup> C-279, MUN, Invoice Number MRP-010-15, to Suncor Energy Inc. (October 22, 2014) ); C-280, MUN, Invoice Number RGCS-001-16, to Suncor Energy Inc. (April 1, 2015)

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Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

#### **B.** Appendix A to Canada's Counter Memorial



<sup>617</sup> **R-163**, MUN Faculty of Engineering and Applied Science Ice Ocean Sentinel System (IOSS) Project R&D Work Expenditure Application Form (Apr. 1, 2015), p. MICI 0001999.

<sup>618</sup> **CW-3**, Sampath Statement I ¶ 107.

<sup>619</sup> C-279, MUN, IOSS, Invoice Number MRP-010-15, to Suncor Energy Inc. (Oct. 22, 2014).

<sup>620</sup> C-280, MUN, IOSS, Invoice Number RGCS-001-16, to Suncor Energy Inc. (Apr. 1, 2015).

<sup>621</sup> **R-164**, Letter from Mike Baker, CNLOPB to **Constitution**, Suncor (Jan. 18, 2016). Suncor submitted the expenditure to the Board for pre-approval on April 1, 2015 (**R-163**, MUN Faculty of Engineering and Applied Science Ice Ocean Sentinel System (IOSS) Project R&D Work Expenditure Application Form (Apr. 1, 2015), the same date that Suncor received an invoice for engaging the work (**C-280**, MUN, IOSS, Invoice Number RGCS-001-16, to Suncor Energy Inc. (Apr. 1, 2015)).

. Once again, the contemporaneous documents tell a story different than the opinion/hearsay evidence proffered by the Claimant's witnesses. Canadian taxpayers should not be required to pay the Claimant for R&D that Suncor would have undertaken regardless of the 2004 Guidelines. Suncor has, in any event, a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research" and to undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of even low-lying masses of floating ice." <sup>622</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

It is simply a canard to argue that a Suncor representative is needed in order to find that this is an incremental expenditure.<sup>623</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, puts to rest Canada's argument that the possible lack of a pre-qualification letter signifies that this expenditure was undertaken in the ordinary course by Suncor.

#### CW-10, Sampath Statement II ¶¶ 118-119

The Ice Ocean Sentinel System ("IOSS") project aims at designing, building, testing, and commercializing an unmanned surface craft equipped with an ice detection radar and an underwater scanning sonar. This technology, even if it were successfully developed, would have no relevance to Suncor's operation of the Terra Nova project.

Canada contends that	
	Canada appears to
suggest that this alleged circumstance shows that this	project was part of Suncor's
ordinary operations. Canada is mistaken.	was very familiar with the
background of Suncor's contribution to this R&D pro	oject. In particular, Suncor

<sup>&</sup>lt;sup>622</sup> C-41, Terra Nova Decision 97.01, pp. 23, 47. See also, **R-165**, Development of a Semi-Submersible Unmanned Surface Craft (2014).

<sup>&</sup>lt;sup>623</sup> Reply Memorial V.C.2.

<sup>&</sup>lt;sup>624</sup> Canada Counter Memorial Appendix A, at A-51.

was confident that the Board would
I agree that the chance of the Board
was low. further noted that the
R&D project was also being financially supported by the Atlantic Canada
Opportunities Agency ("ACOA"), a public agency that supports R&D initiatives in
the Atlantic provinces of Canada, including Newfoundland and Labrador. Suncor
considered
In addition,
confirmed to me that Suncor would not have made this contribution if not
for s.

• See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

# 37. Ice Radar Enhancement Project (

# A. First Witness Statement(s)

## CW-3, Sampath Statement I ¶¶ 28-29

Rain and precipitation can interfere with the types of radar technologies Rutter offers for use on vessels. To mitigate these effects,

)

existing or to develop new ones, with an aim of evaluating their efficacy and to decide which to implement with the radar products offers.<sup>625</sup>

In 2015, HMDC provided for a funding to to research, develop, and to test improved rain and precipitation filtering algorithms.<sup>626</sup> As with the Dual Polarized Radar JIP, any improvements in technology will simply be rolled into its product line. Also,

HMDC would

not agree to such an arrangement in the ordinary course of business.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to improvement of the ice detection performance of . The Claimant alleges that this expenditure is compensable because in the "ordinary course" Hibernia would not agree to an arrangement with a contractor that requires HMDC to fund research while the IP rights vest in the contractor.<sup>627</sup> However, there is no suggestion by any witness that the research and anticipated improvements

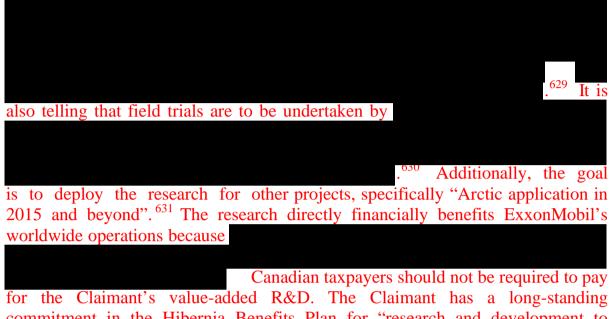
<sup>&</sup>lt;sup>625</sup> C-231, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB (October 14, 2014), *attaching* Ice Radar Enhancement Project R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>626</sup> **C-216**, HMDC, [Draft] May-December 2015 R&D and E&T Expenditures (hereafter, "Draft Hibernia May-December 2015 R&D and E&T Expenditures Report"), Appendix A.

<sup>&</sup>lt;sup>627</sup> **CW-3**, Sampath Statement I ¶ 29.

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are not necessary to and/or relevant to Hibernia. The Claimant has not deducted from its claimed damages the expenses that would have accrued to the Claimant under an allegedly "ordinary course" arrangement for similar R&D. Further, documents confirm that



commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken".<sup>633</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

<sup>&</sup>lt;sup>628</sup> **C-231**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB, attaching Ice Radar Enhancement Project R&D Work Expenditure Application Form (Oct. 14, 2014), p. MOB0004453.

<sup>&</sup>lt;sup>629</sup> *Ibid*, p. MOB0004461.

<sup>&</sup>lt;sup>630</sup> *Ibid*, pp. MOB0004454, 4460.

<sup>&</sup>lt;sup>631</sup> *Ibid*, p. MOB0004453.

<sup>&</sup>lt;sup>632</sup> *Ibid*, p. MOB0004457.

<sup>&</sup>lt;sup>633</sup> **C-37**, Hibernia Decision 86.01, p. 82.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have incurred **matters** for development of a potential technology that it did not need. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>634</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

#### CW-10, Sampath Statement II ¶¶ 49-51

This project's aim was to help

in its proprietary radar products. As I explained in my first witness statement<sup>635</sup> and in paragraphs 27 to 31 in this statement, HMDC would not provide funding to to develop proprietary technology like this.

In its Appendix A, Canada references extensively the form that I submitted to the Board to receive pre-approval for the eligibility of this expenditure.<sup>636</sup> The form references **and a project** proposal received from **a project** proposal received from **b and a project** proposal received from **b and a project**, as I discuss in paragraphs 43 to 44 of this statement.

Canada contends that it is "telling" that define the second state of the reasons discussed at paragraphs 32 to 38 of this statement, does not signify that this project would have been funded in the absence of the Guidelines.

• See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>637</sup> *Id.* at A-53.

<sup>&</sup>lt;sup>634</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>635</sup> **CW-3**, Sampath Statement I ¶ 29.

<sup>&</sup>lt;sup>636</sup> Counter Memorial Appendix A, at A-52 to A-53 (citing **C-231**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB, attaching Ice Radar Enhancement Project R&D Work Expenditure Application Form (Oct. 14, 2014).

- See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")
- See also **CW-10**, Sampath Statement II ¶ 43-44 (explaining that some persons interfacing with mistook

## 38.

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶¶ 40-41

HMDC contributed in 2014 <sup>638</sup> and in 2015 <sup>639</sup> on behalf of the Hibernia project to fund "Phase 2a" of this project, which is a continuation of a JIP organized by PRNL. The purpose of this project phase was to develop the required technical information and specification for
The project has little relevance to the Hibernia project, which has been successfully operated for over twenty years without needing to Advancement of Advancement of a subscription of the subscription of th

• See also **CW-7**, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements").

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to development of technology to identify . The Claimant alleges this expenditure is compensable because Hibernia's project was already designed to withstand the impact of icebergs.<sup>641</sup> The documents, however, confirm that

<sup>&</sup>lt;sup>638</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>639</sup> C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

<sup>&</sup>lt;sup>640</sup> **C-242**, PRNL, Contribution Agreement regarding the Project "Ice Thickness Rader Phase 2a" dated October 24, 2014, Annex A.

<sup>&</sup>lt;sup>641</sup> **CW-5**, Noseworthy Statement I ¶¶ 26-28.

. Thi
research is follow-up work from a research project that
<sup>643</sup> Documents confirm that
<sup>644</sup> The Claimant's witness also
admits that the benefit of such research if developed is the ability
. <sup>645</sup> The research i
not only relevant to
also confirm that this research is necessary: "Safe, reliable, and continuous far
field characterization of the dynamic sea ice environments
field characterization of the dynamic sed field environments
Canadian taxpayers should not be required to pay for the Claimant'

<sup>642</sup> R-166, Letter from K. Sampath, HMDC, to Jeff Bugden, CNLOPB attaching

Radar R&D Work Expenditure Application Form (Nov. 19, 2013), p. 1 of Project Abstract.

<sup>643</sup> *Ibid*, p. 2 of Project Abstract.

<sup>644</sup> *Ibid*.

 $^{645}$  CW-3, Sampath Statement I  $\P$  41.

<sup>646</sup> **R-166**, Letter from K. Sampath, HMDC, to Jeff Bugden, CNLOPB, attaching Multiband Synthetic Aperture Radar R&D Work Expenditure Application Form (Nov. 19, 2013), p. 1 of Project Abstract.

<sup>647</sup> **C-242**, PRNL, Contribution Agreement for "Phase 2a" (Oct. 24, 2014), p. A-1 (p. MOB0004685).

value- added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "promote further research and development in Canada to solve problems unique to the Canadian offshore environment" and for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken".<sup>648</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have incurred for development of a potential technology that it did not need.

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>649</sup> In addition, PRNL was designated to manage this JIP. This fact further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."

Mr. Sampath's further observations about this expenditure, copied below, reinforce the conclusion that the Hibernia operator would not have funded this JIP in the ordinary course of business.

CW-10, Sampath Statement II ¶¶ 61-63

The purpose of this project was

As I noted in my first witness statement, the

<sup>648</sup> **C-37**, Hibernia Decision 86.01, pp. 25, 82.

- <sup>649</sup> **C-2**, Mobil I Award ¶ 67.
- <sup>650</sup> **CW-7**, Durdle Statement I ¶ 17.

project has little relevance to the Hibernia project, which has been successfully operated for over twenty years without needing to

<sup>651</sup> Canada does not appear to dispute this.<sup>652</sup>

I recall having received the original proposal for this project from in this R&D project means in this R&D project means that it would have been funded in the ordinary course of business.<sup>653</sup> For the reasons discussed at paragraphs 32 to 38 of this statement, this line of reasoning is not correct.

Canada further argues that this R&D project may be relevant <sup>654</sup> But the potential application of would not have justified this expenditure by HMDC, for the reasons covered at paragraphs 22 to 26 of this statement. Moreover, the results of this R&D project will be This distribution of the intellectual property rights is not something that ExxonMobil would accept in the ordinary course of business, as discussed at paragraphs 27 to 31 of this statement.

- See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)
- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>&</sup>lt;sup>651</sup> **CW-3**, Sampath Statement I  $\P$  41.

<sup>&</sup>lt;sup>652</sup> Counter Memorial Appendix A, A-53 to A-55.

<sup>&</sup>lt;sup>653</sup> *Id.* at A-53 to A-54.

<sup>&</sup>lt;sup>654</sup> Id.

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• See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")

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# **39. Improved Metocean Support for Offshore Operations (**

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶¶ 54-55

HMDC, along with other companies in the region, receives meteorological forecasting services from a company called
. In 2014, submitted a project
proposal to me as HMDC's R&D Manager asking for funding to develop a
. ultimate goal was to
so as to improve its forecasting of
meteorological and sea conditions in which offshore projects like Hibernia operate.
HMDC provided funding for
Phase 1 of the project in the amount of in 2014, <sup>656</sup> and in 2015
for Phase 2. <sup>657</sup>

HMDC is not in the business of giving money to fund product development by its contractors, even if doing so could theoretically result in improved services. Any eventual improvements in forecasting capabilities would accrue to any project operating in the Grand Banks region, not just Hibernia. It does not make business sense for a single operator like HMDC to bear the costs of improving systems that benefit other players in the region.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves").

<sup>&</sup>lt;sup>655</sup> C-250, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (March 25, 2014), *attaching* Letter from the company to K. Sampath, HMDC (March 22, 2014).

<sup>&</sup>lt;sup>656</sup> C-192, Hibernia 2014 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>657</sup> C-251, Hibernia January-April 2015 Board R&D Decisions, Appendix A; C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to development of technology to enhance the reliability of forecasting of meteorological and oceanic conditions provided by The Claimant alleges this expenditure is compensable because HMDC would not ordinarily fund product development by contractors that will ultimately benefit all players in a region, including competitors.<sup>658</sup> However, there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia. The Claimant has not deducted from its claimed damages the expenses that would have accrued to the Claimant under an allegedly "ordinary course" arrangement for similar R&D. In fact, there is a substantial need for this research. According to AMEC, the entity conducting the research, "A Management Development Company Ltd. (HMDC) sponsored Hibernia Workshop on Metocean Monitoring and Forecasting for the Newfoundland & Labrador Offshore, held 22-24 September 2014, identified reduced visibility in fog as being the most significant metocean issue to affect operations in this harsh environment area. ... Current techniques used to forecast fog are not well established or verified. There is a definite lack of good observations and predictive models have substantial need of improvement. Fog formation and dissipation mechanisms on the Grand Banks are not well understood with very few studies related to this topic since G.I. Taylor's 1913 seminal work."<sup>659</sup> There has also been academic recognition of Grand Banks Advection Fog and the limitations it places on helicopter landing on offshore platforms.<sup>660</sup> More broadly,

Canadian

taxpayers should not be required to pay for the Claimant's value-added R&D. The

<sup>658</sup> **CW-3**, Sampath Statement I ¶ 55.

<sup>659</sup> **R-167**, Amec website excerpt, "Improving Visibility Forecasts for the Grand Banks of Newfoundland and Labrador" (May 30, 2016). Available at: <u>http://cmos.in1touch.org/client/relation\_roster/clientRelationRosterDetails.html?clientRelationId=733</u> 256&clientRelationRosterId=113&no\_header=true&bodyonly=true.

<sup>660</sup> **R-168**, Dalhousie University News Article, "Fog on the Grand Banks" (Aug. 13, 2015). Available at: <u>http://www.dal.ca/faculty/science/physics/news-events/events-seminars/2015/08/13/fog\_on\_the\_grand\_banks.html</u>.

<sup>661</sup> **R-169**, Amec Foster Wheeler, HMDC Metocean R&D Program Workshop Summary (Feb. 20, 2015), p. 4 (p. MICI 0003466).

Claimant has a long- standing commitment in the Hibernia 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."<sup>662</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have incurred **statements** for a study that it did not need. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>663</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

### CW-10, Sampath Statement II ¶ 73

As I discussed in my first witness statement, HMDC already receives metocean information and services as part of its normal operations.<sup>664</sup> This R&D project was not part of that routine service. Rather, I organized a metocean workshop in September 2014 to learn what kinds of data and forecasting models experts and other interested parties might want to have in a metocean research study to be funded by HMDC. As with other extraordinary R&D expenditures, HMDC's interest in funding such a study was to help the Hibernia project to satisfy its expenditure obligations under the Guidelines. It would not have funded a metocean study, particularly of this magnitude, focused on the general interests of experts in the field.<sup>665</sup>

<sup>&</sup>lt;sup>662</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>663</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>664</sup> **CW-3**, Sampath Statement I ¶ 54.

<sup>&</sup>lt;sup>665</sup> See also paragraphs 22 through 26, above.

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# 40. Improving Stability of Helicopters Following Ditching (

# A. First Witness Statement(s)

### CW-7, Durdle Statement I ¶¶ 26-30

A fatal accident occurred during the night of March 12, 2009, which involved the emergency water landing (or "ditching") of Cougar Helicopters Flight 491 offshore of Newfoundland. In response to the incident, the Board ordered the operators of offshore projects to cease night flying.

This incident also led to the Board's Offshore Helicopter Safety Inquiry ("Helicopter Inquiry"), led by the Honourable Robert Wells. The Helicopter Inquiry had two phases. In the first, Commissioner Wells issued a report to the Board in October 2010 with 29 recommendations (the "Phase I Report and Recommendations"). <sup>666</sup> In the second, Commissioner Wells addressed the Canadian Transportation Safety Board's Report concerning the ditching incident, on which basis he submitted to the Board in July 2011 the Phase II Report and Recommendations.<sup>667</sup>

To be clear, neither the Phase I nor Phase II Report and Recommendations are binding on any of the operators offshore Newfoundland. Moreover, the recommendations were directed to the regulator (*i.e.*, the Board), rather than to the offshore owners or operators. In the wake of the Phase I Report and Recommendations, the Board has required certain conditions be met before night flying can resume; however, the conditions are not in themselves requirements. During my tenure as Safety Supervisor,

today and have operated since 2009

. In fact, these projects operate

Nevertheless, the tragic ditching of Cougar Flight 491 and the Board's nighttimeflying conditions highlighted certain issues for safety-related research. For instance, in the "Improving Stability of Helicopters Following Ditching" project, a helicopter model, representing the Sikorsky S92A model, will be fabricated to

<sup>&</sup>lt;sup>666</sup> C-213, Commissioner Robert Wells, Offshore Helicopter Safety Inquiry (Phase I), Volume 1 Report and Recommendations.

<sup>&</sup>lt;sup>667</sup> **C-214**, Commissioner Robert Wells, Offshore Helicopter Safety Inquiry (Phase II), Report and Recommendations arising from the Transportation Safety Board's Report.

scale.<sup>668</sup> The scale model could be used to analyze helicopter behavior under realistic ditching conditions to determine optimum design parameters to keep the helicopter upright (*i.e.*, to prevent capsizing) in wave conditions representative of those prevalent on the Grand Banks of Newfoundland.

As stated, HMDC was not required to fund this project by the Board or any other regulator. In fact, none of the 29 recommendations in the Phase I Report and Recommendations address stability of helicopters after ditching. Moreover, none of the Hibernia owners own the rights to the design of the Sikorsky S92A helicopter. In fact, we fly only three aircraft out of the entire fleet of this model, meaning that it would be extremely uneconomic for the Hibernia project owners to undertake a general redesign. In the absence of the Guidelines, these design improvements, even if they were needed, would have been funded by Sikorsky. In fact, Recommendation 27 of the Phase I Report and Recommendations specifically directs the *regulator* to involve itself in and to fund its own research on helicopter safety, not the operators.<sup>669</sup>

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to experiments to improve stability of Sikorsky S-92A helicopters following ditching in the interest of avoiding capsizing. The Claimant alleges that this expenditure is compensable because the research to improve the Sikorsky aircraft used by the Claimant at Hibernia would normally be funded by Sikorsky itself.<sup>670</sup> However, documents show that the research was provide the sikorsky. The formula is the sikorsky in the sikorsky. The formula is compensable because the research by Sikorsky. The sikorsky is a sikorsky is shown as the sikorsky is shown as the sikorsky is shown as the sikorsky.

focus of the research is on

<sup>671</sup> **R-170**, PRNL Contribution Agreement for Improving Helicopter Stability in Waves Following Ditching – Phase I (Mar. 5, 2013), p. A-1 (p. MICI 0003614).

<sup>&</sup>lt;sup>668</sup> C-215, Letter from **Constant of**, HMDC, to J. Bugden, CNLOPB, *attaching* R&D Work Expenditure Application related to Improving Helicopter Stability in Waves Following Ditching (April 15, 2012).

<sup>&</sup>lt;sup>669</sup> **C-213**, Commissioner Robert Wells, Offshore Helicopter Safety Inquiry (Phase I), Volume 1 Report and Recommendations, at p. 300.

<sup>&</sup>lt;sup>670</sup> **CW-7**, Durdle Statement I  $\P$  30.

".<sup>672</sup> It is specifically in the "sea states [found in Newfoundland and Labrador where] it is most likely that the helicopter will overturn".<sup>673</sup>

As admitted by the Claimant's witness, it was "the tragic ditching of Board's nighttime flying conditions [that] Flight 491 and the Cougar highlighted certain issues for safety-related research".<sup>676</sup> The inquiry conducted by the Board after the fatal helicopter accident involving the Hibernia project did not focus on "matters involving the design or operation of the Sikorsky C-92A", but still observed that "the issues of interior design and equipment and safety within the helicopter cabin should be addressed and solutions sought".<sup>677</sup> The Claimant confirmed in its expenditure application to the Board that the "the need to provide a side-floating capability [was] identified by the C-NLOPB [Board] as a possible means of preventing total inversion, and by extension, significantly increasing the odds that occupants can survive a capsize and escape from a ditched helicopter" and this research is in-line with that suggestion.<sup>678</sup> Canadian taxpayers should not have to compensate the Claimant for commitments it made in the aftermath of the Hibernia helicopter crash to improve safety and preparedness of helicopters and offshore workers. The Claimant has in any event a long-standing commitment in

<sup>673</sup> **C-213**, Canada-Newfoundland and Labrador Offshore Helicopter Safety Inquiry (Phase I), Volume 1 Report and Recommendations (Oct. 2010), p. 208 (p. MOB0003879).

<sup>674</sup> **C-215**, Letter from **C-215**, HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Improving Helicopter Stability in Waves Following Ditching" (Apr. 15, 2012), p. MOB0004295.

<sup>675</sup> **R-171**, Letter from **PRNL** to Rod Hutchings, HMDC with attachments (Mar. 21, 2014), Attachment B, p. 17 (MICI 0004861).

<sup>676</sup> **CW-7**, Durdle Statement I ¶ 29.

<sup>677</sup> **C-213**, Canada-Newfoundland and Labrador Offshore Helicopter Safety Inquiry (Phase I), Volume 1 Report and Recommendations (Oct. 2010), pp. 23, 203 (p. MOB0003694, 3874).

<sup>678</sup> **C-215**, Letter from **C-215**, HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Improving Helicopter Stability in Waves Following Ditching" (Apr. 15, 2012), p. MOB0004295.

<sup>&</sup>lt;sup>672</sup> **C-215**, Letter from **Constant of**, HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Improving Helicopter Stability in Waves Following Ditching" (Apr. 15,2012), p. MOB0004285.

the Hibernia 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."<sup>679</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized that not all safetyrelated expenditures would have been undertaken even in the absence of the Guidelines.<sup>680</sup> Mr. Durdle's further observations about this expenditure in his second witness statement, copied below, reinforce the conclusion that HMDC would not have funded this JIP in the ordinary course of business.

# CW-12, Durdle Statement II ¶¶ 14 – 16

In my first witness statement, I explained that if not for the spending requirements of the Guidelines, the Hibernia project would not have funded a study like this to develop possible design concepts for Sikorsky, the manufacturer of the S-92A helicopter.<sup>681</sup> Canada notes that this design study

, claiming that this

circumstance makes it "unlikely" that Sikorsky itself would fund this study.<sup>682</sup> But I do not see how Sikorsky's possible reluctance to put up its own funding for a study of the S-92A helicopter's design would cause HMDC to commit project joint account funds to this study.

Canada also attempts to link this study to recommendations developed through the Helicopter Inquiry after the tragic ditching of Cougar Flight 491.<sup>683</sup> As I stated in

<sup>680</sup> Id. ¶ 76-78.

<sup>681</sup> **CW-7**, Durdle Statement I  $\P$  30.

<sup>683</sup> *Id.* at A-58 (citing **C-213**, Canada-Newfoundland and Labrador Offshore Helicopter Safety Inquiry (Phase I), Volume 1 Report and Recommendations (Oct. 2010), pp. 23, 203 (pp. MOB0003694, 3874); **C-215**, Letter from **Constant 1**, HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Improving Helicopter Stability in Waves Following Ditching" (Apr. 15, 2012), p. MOB0004295).

<sup>&</sup>lt;sup>679</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>682</sup> Counter Memorial Appendix A, at A-57.

my first witness statement, the Helicopter Inquiry recommendations were not requirements and, in any event, were directed to the Canada-Newfoundland and Labrador Offshore Petroleum Board ("Board"), not HMDC.<sup>684</sup> If this expenditure did not help satisfy Hibernia's spending obligations under the Guidelines, it would not make sense for HMDC, as opposed to Sikorsky, to fund this design study.<sup>685</sup>

Canada asserts that Mobil made "commitments . . . in the aftermath of the Hibernia helicopter crash to improve safety and preparedness of helicopters and offshore workers." <sup>686</sup> Of course, Mobil, Mobil's affiliates, HMDC, and Suncor all encourage and support helicopter safety. But there was no commitment by any of them to change or improve helicopter design. Although the Board issued eight conditions to be fulfilled before it would permit the operators to return to nighttime flying for routine purposes, these conditions were, like the Helicopter Inquiry recommendations, not requirements that the projects' operators or owners had to fulfill. <sup>687</sup> In fact, the design study at issue here is not even one of the eight enumerated conditions, <sup>688</sup> and it is unrelated to any unique safety challenges presented by nighttime flying that are not also present when flying at other times of day.

 $^{685}$  *Id.* ¶ 30.

<sup>686</sup> Counter Memorial Appendix A, at A-58 to A-59.

<sup>687</sup> **CW-7**, Durdle Statement I ¶ 34; **C-353**, CNLOPB, Advising Document OHSI Phase I, Recommendation 12 Regarding passenger night flights (January 9, 2012), at p. 11-12.

<sup>688</sup> **C-353**, CNLOPB, Advising Document OHSI Phase I, Recommendation 12 Regarding passenger night flights (January 9, 2012), at p. 11-12.

 $<sup>^{684}</sup>$  CW-7, Durdle Statement I ¶ 28.

# 41. Industrial Chair in Petroleum Geosciences (\$500,000)

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 85-86

In the Mobil I arbitration, the tribunal concluded that a \$2.3 million contribution made by HMDC to MUN to fund an Industrial Research Chair in Petroleum Geosciences was an incremental expenditure.<sup>689</sup> This money was used to purchase equipment so as to attract stronger candidates for the newly created position.<sup>690</sup>

In 2012, in continuation of the original contribution, HMDC donated an additional \$500,000.<sup>691</sup> The 2012 contribution was likewise motivated by the Guidelines and, in their absence, would not have been made in the ordinary course of business.

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a contribution to Memorial University for a Chair position that will build on existing petroleum geoscience expertise and research capacity and develop a stronger collaboration between Memorial University and the oil and gas industry. The Claimant alleges this expenditure is compensable because HMDC would not make contributions of this magnitude in the absence of the Guidelines.<sup>692</sup> The documents, however, show that the Claimant made this expenditure in the interest of its future employees: "Recruiting impact – MUN is a large, strong geoscience department...from which significant geoscience hires are made yearly

	. 693	Docu	ments	s also	show	that	t HMDC	valued	receipt	of
positive	recognition	for	this	contribu	ition a	and				

<sup>689</sup> C-2, Mobil I Award ¶¶ 125-127.

<sup>690</sup> C-266, Hibernia MUN-NSERC-Hibernia Project Industrial Chair in Petroleum Geosciences R&D Work Expenditure Application Form (Nov. 10, 2011).

<sup>691</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B.

 $^{692}$  CW-3, Sampath Statement I ¶ 81.

<sup>693</sup> **R-172**, EMC R&D Screening Committee Presentation (Oct. 3, 2011), p. MICI 0004655.

. Hibernia attracted positive recognition and
goodwill for this expenditure:
<sup>695</sup> and the Chair position is entitled "NSERC Hibernia
Project Industrial Research Chair in Petroleum Geosciences". <sup>696</sup> The research
supported by this contribution is itself highly relevant to Hibernia and
ExxonMobil operations. The research supported
<sup>697</sup> Funds were also used to
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This means that ordinary course

research could also benefit from this expenditure. Canadian taxpayers should not be required to pay the Claimant for this value-added initiative. The Claimant has a long-standing commitment in the Hibernia 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."<sup>700</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

<sup>696</sup> **R-173**, Letter of Agreement between HMDC and MUN for the Hibernia Project Chair in Petroleum Geosciences Fund (Dec. 10, 2012), p. MICI 0003634.

<sup>697</sup> **C-266**, Hibernia MUN-NSERC-Hibernia Project Industrial Chair in Petroleum Geosciences R&D Work Expenditure Application Form (Nov. 10, 2011), p. MOB0005039.

<sup>698</sup> *Ibid*, p. MOB0005040.

<sup>699</sup> *Ibid*, p. MOB0005038.

<sup>&</sup>lt;sup>694</sup> **R-173**, Letter of Agreement between HMDC and MUN for the Hibernia Project Chair in Petroleum Geosciences Fund (Dec. 10, 2012), p. MICI 0003632.

<sup>&</sup>lt;sup>695</sup>**C-266**, Hibernia MUN-NSERC-Hibernia Project Industrial Chair in Petroleum Geosciences R&D Work Expenditure Application Form (Nov. 10, 2011), p. MOB0005042.

<sup>&</sup>lt;sup>700</sup> **C-37**, Hibernia Decision 86.01, p. 25.

# C. Mobil's Response And Further Witness Testimony

The incremental nature of the annual contributions to establish the Industrial Chair in Petroleum Geosciences at MUN is *res judicata* and cannot be questioned in this proceeding. The Mobil I Majority held as follows:

The Majority finds that the Claimants have proven that this is an incremental expenditure.

Regarding the Respondent's argument that this spending is in accordance with the pre-Guidelines regime, the Majority has already outlined its view that the mere fact that an expenditure is consistent with the pre-Guidelines regime does not resolve whether it is introduced as a result of the Guidelines or not.

The Majority finds the timing of this funding to be probative of a causal link to the Guidelines; the previous funding for research chairs began in 1986 and continued until 1991. This amounts to a 20 year break in funding for or related to research chairs. The reinstitution of this type of funding is convincingly explained by the inception of the Guidelines.<sup>701</sup>

Canada does not address, much less dispute, the Mobil I Majority's final disposition on the incremental nature of this contribution. While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

### CW-10, Sampath Statement II ¶¶ 102-103

Canada contends that HMDC made this large donation to the Geosciences department at MUN "in the interest of its future employees."<sup>702</sup> This is not accurate, for the reasons given in my first witness statement at paragraphs 82 through 83. The graduates of MUN's Geophysics department may end up in a number of industries or companies in practically any part of the world. Moreover,

<sup>&</sup>lt;sup>701</sup> C-2, Mobil I Award ¶¶ 125-127 (footnotes omitted).

<sup>&</sup>lt;sup>702</sup> Counter Memorial Appendix A, at A-82 to A-83.

contrary to Canada's suggestion, <sup>703</sup> any possible "recognition" or "goodwill" generated through this expenditure would not have justified HMDC's contribution, for the reasons given at paragraphs 39 through 42 of this statement.

Canada also quotes from a document suggesting that research supported by this contribution will benefit existing productions offshore Newfoundland and Labrador and encourage future investment.<sup>704</sup> I do not see how such benefits and investment would flow from HMDC's contribution. Moreover, I do not agree with a quotation that appears to be attributed to a MUN faculty researcher concerning

<sup>705</sup> Nor

can I understand how Canada understands by this quotation that "ordinary course research could also benefit from this expenditure."<sup>706</sup> Instead, I believe the Mobil I tribunal correctly concluded that this expenditure was driven by the Guidelines.<sup>707</sup>

<sup>703</sup> *Id.* at A-59 to A-60.

<sup>705</sup> *Id.* (quoting **C-266**, Hibernia MUN-NSERC-Hibernia Project Industrial Chair in Petroleum Geosciences R&D Work Expenditure Application Form (Nov. 10, 2011), p. MOB0005040).

<sup>706</sup> *Id.* at A-60 to A-61.

<sup>707</sup> **C-2**, Mobil I Award ¶ 128.

<sup>&</sup>lt;sup>704</sup> *Id.* at A-60 (quoting **C-266**, Hibernia MUN-NSERC-Hibernia Project Industrial Chair in Petroleum Geosciences R&D Work Expenditure Application Form (Nov. 10, 2011), p. MOB0005039).

# 42. Johnson GEO Centre Programming (\$660,000)

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 138-139

The Johnson GEO Centre is run by a not-for-profit organization in St. John's that promotes interest in the geological sciences and educates visitors and the community about the unique geological features of Newfoundland and Labrador.<sup>708</sup> The Claimants in the Mobil I arbitration claimed that HMDC's 2011 contributions to the Johnson GEO Centre were incremental expenditures, and Canada ultimately did not contest this claim.<sup>709</sup>

In 2012, HMDC made another contribution to the Johnson GEO Centre in the amount of \$660,600.<sup>710</sup> This contribution funded science camps, science clubs, and enhancement of exhibits at the Centre.<sup>711</sup> As with the contribution in 2011, but for the Guidelines, HMDC would not have made the 2012 contribution to the Johnson GEO Centre.

### **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that this "community contribution" is compensable because it would not have been undertaken in the absence of the Guidelines. <sup>712</sup> The documents, however, show that HMDC valued receipt of positive recognition for this contribution and



- <sup>709</sup> **C-2**, Mobil I Award ¶ 128.
- <sup>710</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B.
- <sup>711</sup> **C-307**, HSE Legacy in Science, Technology, Engineering and Math (Apr. 26, 2011).
- <sup>712</sup> **CW-3**, Sampath Statement I ¶ 133.

<sup>&</sup>lt;sup>708</sup> **C-306**, Johnson GEO Centre, https://www.geocentre.ca/about/our-building/ (undated).

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HMDC then went further and released a press release that included the ownership structure of HMDC and the name "ExxonMobil Canada" and received press coverage. <sup>714</sup> Further, Jamie Long, president of Hibernia is quoted publicly as saying that "Hibernia is proud to support programs that will teach children and adults alike about resource development, particularly when they create excitement about the related science, technology, engineering and math".<sup>715</sup>

. A section of the Centre (kids' section) is now titled "Hibernia KidsPlace". Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full extent of this expenditure.

### C. Mobil's Response And Further Witness Testimony

The incremental nature of HMDC's contributions to the Johnson GEO Centre is *res judicata* and cannot be questioned in this proceeding. In the Mobil I Arbitration, Canada accepted that Mobil "provided sufficient evidence" that this

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<sup>715</sup> **R-179**, Memorial University News Article, "GEO CENTRE's science education programs enhanced with \$2.3 million grant" (Apr. 27, 2012). Available at: <u>http://today.mun.ca/news.php?news\_id=7261.</u>

<sup>&</sup>lt;sup>713</sup> **R-174**, Letter of Agreement between HMDC and Johnson GEO Centre Foundation Inc. for Camps, Clubs and KIDZone Enhancement at the Johnson GEO Centre (May 17, 2012), pp. MICI0003639-3640.

<sup>175,</sup> HiberniaNewsRelease, "ScienceforyoungstersinNLgetsaboostfromHiberniaproject" (Apr. 24, 2012). Availableat: http://www.hibernia.ca/news/2012/HMDCGEOCENTRE.pdf; R-176, Hibernia News Release, "Hibernia to support Johnson GEO CENTRE's science education programs" (Jun. 14, 2012). Available at: http://www.hibernia.ca/geo.pdf; R-177, The Telegram News Article, "Hibernia \$2.3 million to Geo Centre" (Apr. 27, donates 2012). Available at: http://www.thetelegram.com/News/Local/2012-04-27/article-2965465/Hi: **R-178**. Johnson Geo website excerpt, "Hibernia KidsPlace" (Undated). Centre Available at: https://www.geocentre.ca/learn/hibernia-kidsplace/.

<sup>&</sup>lt;sup>716</sup> **R-117**, EMC R&D Screening Committee (May 3, 2012), slide 14 (p. MICI 0004690).

community contribution was incremental.<sup>717</sup> The Mobil I Majority decided that this contribution was an incremental expenditure based on Canada's acceptance.<sup>718</sup> Canada does not address its prior acceptance, much less does it dispute the Mobil I Majority's final disposition on the incremental nature of this expenditure.

While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

# CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

. . . .

• Johnson GEO Centre Programming;<sup>719</sup>

••••

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>720</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>721</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition

<sup>720</sup> *Id.* ¶ 133.

<sup>721</sup> *Id*.

<sup>&</sup>lt;sup>717</sup> C-389, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Canada's Rejoinder on Damages (January 25, 2013, at ¶ 123 n.267. See also C-390, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Second Post-Hearing Report of Richard E. Walck (January 25, 2013), Annex I, at p. 7.

<sup>&</sup>lt;sup>718</sup> **C-2**, Mobil I Award ¶¶ 128-129 & n. 162.

<sup>&</sup>lt;sup>719</sup> **CW-3**, Sampath Statement I ¶¶ 138-139.

in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>722</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>&</sup>lt;sup>722</sup> **CW-3**, Sampath Statement I ¶ 132. See also paragraphs 39 through 42, above.

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# 43. Large Scale Iceberg Impact Experiment (

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 70-71

The Large Scale Iceberg Impact Experiment ("LSIIE") is being funded through the PRNL as a JIP, in which both Hibernia and Terra Nova are participants. Its objective is to provide pressure-area data based on measured iceberg impact forces, with a focus on particularly large icebergs.<sup>723</sup> In theory, the data obtained could lead to a better understanding of impact events between large icebergs and offshore structures.

In 2014, HMDC and Suncor each contributed to Phase 1 of the LSIIE.<sup>724</sup> The data that may be eventually produced through this project is unlikely to assist the Hibernia and Terra Nova projects. Hibernia operates from a gravity base structure that was designed to withstand the impact of an iceberg. While Terra Nova can be more sensitive to ice-related issues, it is operated from an FPSO; the essential advantage of an FPSO is that it can sail away from a hazard, such as an iceberg.

• See also CW-7, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements").

### **B.** Appendix A to Canada's Counter Memorial

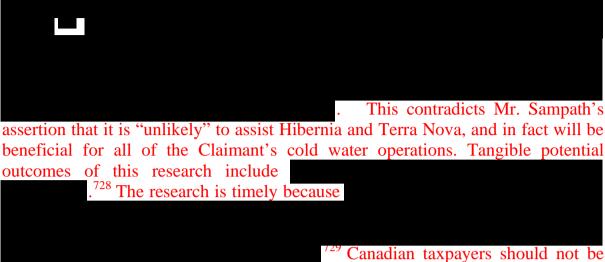
This expenditure relates to collection of pressure-area data on the basis of of measured iceberg impact forces. The Claimant alleges that this expenditure is compensable because it is "unlikely" to assist the Hibernia and Terra Nova projects.<sup>725</sup> The documents, however, indicate the value of this particular project

<sup>&</sup>lt;sup>723</sup> **C-258**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (February 25, 2014), *attaching* Large Scale Iceberg Impact Experiment R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>724</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A; **C-240**, Terra Nova 2014 Board R&D Decisions, Appendix F.

<sup>&</sup>lt;sup>725</sup> **CW-3**, Sampath Statement I  $\P$  71.

to Claimant's other operations, particularly in the Arctic. The documents state that the objective of the project is to



required to compensate the Claimant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasures...to minimize oil spills from ALPs and subsea components due to iceberg impact"<sup>730</sup> and for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken",<sup>731</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research".<sup>732</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

<sup>727</sup> *Ibid*.

<sup>729</sup> **R-182**, PRNL, Contribution Agreement for LSIIE Phase 1 Concept Selection (Feb. 19, 2014), p. MICI 0003732.

 $^{730}$  C-37, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

<sup>&</sup>lt;sup>726</sup> **R-180**, C-CORE Presentation, Large-Scale Iceberg Impact Experiment – Phase 1 Kick-off Meeting (Jul. 9, 2014), p. MICI 0003667.

<sup>&</sup>lt;sup>728</sup> **R-181**, C-CORE, Large Scale Iceberg Impact Experiment – Workshop Report (Revision 2.0) (Oct. 2014), p. MICI 0003707.

<sup>&</sup>lt;sup>731</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>&</sup>lt;sup>732</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

# C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>733</sup>

In addition, PRNL's involvement in organizing this JIP further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>734</sup>

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, the Hibernia and Terra Nova operators would not have contributed any amount to study the impacts of icebergs. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>735</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion this was an incremental expenditure, particularly given that the data would be available to Mobil's competitors.

# CW-10, Sampath Statement II ¶ 88-89

This purpose of this R&D project was to obtain pressure-area measurement data of iceberg impacts. Canada contends that excerpts from certain documents "contradict" my conclusion that this project is unlikely to assist the Hibernia and Terra Nova projects.<sup>736</sup> The excerpts referenced by Canada do not contradict my conclusion. This iceberg-focused R&D project is not relevant to Hibernia because—it bears repeating—large icebergs cannot reach the Hibernia GBS located on the shallow banks, and the GBS is designed to withstand the impact of

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<sup>736</sup> *Id.* at A-63

<sup>&</sup>lt;sup>733</sup> **C-2**, Mobil I Award ¶ 67.

<sup>&</sup>lt;sup>734</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>&</sup>lt;sup>735</sup> **C-2**, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

smaller icebergs. The Terra Nova FPSO, being a vessel, can sail away from approaching iceberg hazards.

Canada also claims that this project will yield "potential outcomes" that may benefit future projects in higher latitude regions.<sup>737</sup> As discussed at paragraphs 22 through 26 of this statement, the potential for any such benefits accruing to other projects would not have justified HMDC and Suncor, as project operators, making the expenditures in the ordinary course of business. To my knowledge, the results of this R&D project

- See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)
- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>737</sup> Id.

# 44. Manuels River Education Centre (\$2,840,000)

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 140-141

Manuels River Valley is located on the island of Newfoundland and boasts a number of public hiking trails. In the Mobil I arbitration, Canada did not oppose the Claimants' request for recovery based on HMDC's \$1 million contribution to the Manuels River Natural Heritage Society for the construction of an education center.<sup>738</sup>

As a continuation of its 2011 contribution, in 2012 HMDC made an additional contribution of \$2 million to the Manuels River Education Centre.<sup>739</sup> Later, in 2013, HMDC made a further contribution of \$840,000 to support the design, provision, and delivery of educational programs over a four year period that would be aimed at various audiences from young children to adults.<sup>740</sup> As with the 2011 contribution, the 2012 and 2013 contributions were made as a result of the Guidelines.

#### **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that this "community contribution" is compensable because it would not have been undertaken in the absence of the 2004 Guidelines.<sup>741</sup> The documents, however, show that HMDC valued receipt of positive recognition for this contribution and

<sup>&</sup>lt;sup>738</sup> C-2, Mobil I Award ¶ 128; C-189, Letter from J. Bugden, CNLOPB, to [100], HMDC (June 7, 2012), *attaching* 2011 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations, Appx. B.

<sup>&</sup>lt;sup>739</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B.

<sup>&</sup>lt;sup>740</sup> C-212, Hibernia 2013 Board R&D Decisions, Appendix B; C-308, Letter from HMDC, to J. Bugden, CNLOPB (April 8, 2013), *attaching* Manuels River Curriculum Aligned Education Programming R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>741</sup> **CW-3**, Sampath Statement I ¶ 133.

#### <sup>742</sup> HMDC

then went further and released a press release that included the ownership structure of HMDC and the name "ExxonMobil Canada" and received press coverage.<sup>743</sup> The Centre is now called the "Manuels River Hibernia Interpretation Centre". Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full extent of this expenditure.

### C. Mobil's Response And Further Witness Testimony

The incremental nature of HMDC's contribution to the Manuels River Education Centre is *res judicata* and cannot be questioned in this proceeding. In the Mobil I Arbitration, Canada accepted that Mobil "provided sufficient evidence" that this community contribution was incremental.<sup>744</sup> The Mobil I Majority decided that this contribution was an incremental expenditure based on Canada's acceptance.<sup>745</sup> Canada does not address its prior acceptance, much less does it dispute the Mobil I Majority's final disposition on the incremental nature of this expenditure.

<sup>743</sup> R-184, Hibernia News Release, "Hibernia contributes \$840,000 to Manuels River for Educational Programming" (Mar. 4, 2014). Available at: <u>http://www.hibernia.ca/news/2014/HDMCManuelsRiver.pdf</u>; R-185, The Telegram News Article, "Manuels River interpretation centre opens Thursday" (Jul. 3, 2013). Available at: <u>http://www.thetelegram.com/News/Local/2013-07-03/article-3300617/Manuels-River-interpretationcentre-opens-Thursday/1</u>; R-186, Manuels River website excerpt, "Visit" (Undated). Available at: <u>http://manuelsriver.com/centre/</u>.

<sup>744</sup> C-389, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Canada's Rejoinder on Damages (January 25, 2013, at ¶ 123 n.267. See also C-390, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Second Post-Hearing Report of Richard E. Walck (January 25, 2013), Annex I, at p. 7.

<sup>745</sup> **C-2**, Mobil I Award ¶¶ 128-129 & n. 162.

<sup>&</sup>lt;sup>742</sup> **R-183**, Letter of Agreement between HMDC and Manuels River Natural Heritage Society, Inc. for Manuels River Interpretation Centre (May 11, 2011), p. MICI 0003757.

While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

# CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

••••

• Manuels River Education Centre;<sup>746</sup>

••••

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>747</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>748</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>749</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly

<sup>747</sup> *Id.* ¶ 133.

<sup>748</sup> Id.

<sup>&</sup>lt;sup>746</sup> **CW-3**, Sampath Statement I ¶ 140-141,

<sup>&</sup>lt;sup>749</sup> *Id.* ¶ 132. See also paragraphs 39 through 42, above.

given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

# 45. Marine Dredge Disposal (

)

# A. First Witness Statement(s)

### CW-8, Dunphy Statement I ¶¶ 17-18

The concept for the Marine Dredge Disposal JIP was also discussed at the HSE Workshop organized by PRNL.<sup>750</sup> Its purpose was to measure biological productivity at offshore dredge disposal sites and to compare the results to natural conditions of the surrounding Grand Banks environment.<sup>751</sup> It was primarily aimed at testing an assumption, inherent in regulatory policy on marine habitat impacts, that harm to marine sediments caused by deposition of clean uncontaminated marine sediments was significant and unacceptable, thereby warranting the application of a costly habitat compensation policy. The study tested the hypotheses that sites where marine sediments were disposed were subject to a discernable rate of biological recovery.

Were this type of study needed to demonstrate an acceptably low level of risk, I believe it would have been undertaken long before the HSE Workshop in 2012. To provide a counter example, the Hibernia and Terra Nova projects have for many years conducted Environmental Effects Monitoring ("EEM") programs, which are required of the operators by the Board.<sup>752</sup> The EEM programs involve periodic assessments of the marine environments surrounding the Hibernia and Terra Nova facilities and are capable of detecting significant changes that might raise concern. The Marine Dredge Disposal JIP is not part of the EEM programs mandated by the Board and it goes beyond what responsible operators like HMDC and Suncor do in the ordinary course of business.

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a project aimed at proving the hypothesis that biological productivity at offshore dredge disposal sites is similar to or enhanced

<sup>&</sup>lt;sup>750</sup> **C-316**, HSE Workshop Voting Results: Environmental Projects (undated).

<sup>&</sup>lt;sup>751</sup> **C-320**, Letter from **Constant**, HMDC, to J. Bugden, CNLOPB (June 4, 2012), *attaching* R&D Work Expenditure Application for the "Marine Dredge Disposal – Measuring Recovery to Natural Conditions" project.

<sup>&</sup>lt;sup>752</sup> **C-321**, CNLOPB, Environmental Effects Monitoring (EEM) – Background (undated).

relative to the natural conditions of the surrounding environment, and to measure the speed and extent that a disposal site recovers after disposal activity. The Claimant alleges that this project is compensable because if it were needed it would have been undertaken long before 2012, and it "goes beyond what responsible operators like HMDC and Suncor do in the ordinary course of business". <sup>753</sup> However, according to the documents, environmental effects monitoring is an ongoing activity undertaken by projects with surveys "begin[ning] during the first full year of offshore development drilling ..., [and] becoming biennial [after the first two years of operations]".<sup>754</sup> Further, the documents indicate that this project

By the <b>C</b>	Claimant's	own a	admissior	۱,			
				This res	search		
		purs	suant to	Fisheries	Act ob	ligations	that
require compensation for	or activities	on fi	sh habit	ats. <sup>757</sup>			
					Canad	ian taxpa	yers
							·

should not be required to compensate the Claimant for a project that would clearly be beneficial for the Claimant in managing its liabilities. The Claimant also has a long-standing commitment in the Hibernia 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", <sup>759</sup> and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding

<sup>753</sup> **CW-8**, Dunphy Statement I  $\P$  18.

<sup>754</sup> **C-321**, CNLOPB, Environmental Effects Monitoring (EEM) – Background, p. 1.

<sup>755</sup> **C-320**, Letter from **Marine**, HMDC, to J. Bugden, CNLOPB, attaching R&D Work Expenditure Application for the "Marine Dredge Disposal – Measuring Recovery to Natural Conditions" (Jun. 4, 2012), p. 1 (p. MOB0005731).

<sup>756</sup> *Ibid*, pp. 1-2 (pp. MOB0005731-5732).

<sup>757</sup> **R-187**, PRNL, Presentation, Marine Dredge Disposal – Measuring Recovery to Natural Conditions (Undated), p. MICI 0003813.

<sup>758</sup> **R-188**, PRNL, Contribution Agreement for Marine Dredge Disposal – Measuring Recovery to Natural Conditions (Jul. 31, 2012), p. MICI 0003851.

<sup>759</sup> **C-37**, Hibernia Decision 86.01, p. 25.

basic research".<sup>760</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>761</sup> In addition, Mr. Dunphy's further comments in his second witness statement, copied below, reinforce the conclusion that this JIP was not undertaken in the ordinary course of Hibernia's and Terra Nova's business.

#### CW-13, Dunphy Statement II ¶¶ 7 through 11

The Marine Dredge Disposal JIP measures biological productivity at offshore dredge disposal sites and compares these results to the natural conditions of the surrounding marine environment.<sup>762</sup> Canada appears to imply that the Marine Dredge Disposal JIP is part of the Hibernia and Terra Nova projects' existing environmental effects monitoring ("EEM") programs, which are undertaken in the ordinary course of business.<sup>763</sup> But, as I noted in my first witness statement, "[t]he Marine Dredge Disposal JIP is not part of the EEM programs" and "it goes beyond what responsible operators like HMDC and Suncor do in the ordinary course of business."<sup>764</sup> Hibernia's EEM program, which was last updated in 2013 and accepted by the Board, has no requirement for environmental effects monitoring

<sup>763</sup> Counter Memorial Appendix A, at A-65 (citing **C-321**, CNLOPB, Environmental Effects Monitoring (EEM) – Background, p. 1.).

<sup>764</sup> **CW-8**, Dunphy Statement I ¶ 18.

<sup>&</sup>lt;sup>760</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

<sup>&</sup>lt;sup>761</sup> **C-2**, Mobil I Award ¶ 67.

<sup>&</sup>lt;sup>762</sup> **CW-8**, Dunphy Statement I ¶ 17.

relating to dredging activities.<sup>765</sup> Terra Nova's Board-approved EEM program likewise has no such requirement.<sup>766</sup>

Canada also contends that this project would be beneficial to managing potential "liabilities."<sup>769</sup> This contention appears to be based on an excerpt of a PRNL presentation about the Marine Dredge Disposal JIP,

To understand what this

statement means—and to show why it does not show that the Marine Dredge Disposal JIP would have been funded but for the Guidelines—additional context is needed. At the time when the idea for this JIP was devised, Section 35 of the

<sup>766</sup> **C-359**, Terra Nova 2012 Environmental Effects Monitoring Program Year 8, Vol. 1 (October 2013), at p. 8.

<sup>767</sup> Counter Memorial Appendix A, at A-65 to A-66 (citing **C-320**, Letter from **Memory**, HMDC, to J. Bugden, CNLOPB, attaching R&D Work Expenditure Application for the "Marine Dredge Disposal – Measuring Recovery to Natural Conditions" (Jun. 4, 2012)).

<sup>768</sup> **CW-8**, Dunphy Statement I ¶¶ 14, 18.

<sup>769</sup> Counter Memorial Appendix A, at A-66.

<sup>770</sup> *Id.* (quoting **R-187**, PRNL, Presentation, Marine Dredge Disposal – Measuring Recovery to Natural Conditions (Undated), p. MICI 0003813).

<sup>&</sup>lt;sup>765</sup> **C-358**, Stantec Consulting Ltd., Hibernia Oil and Gas Production and Development Drilling Project Environmental Effects Monitoring Plan, Final Report (November 18, 2013).

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Canadian Fisheries Act provided that "[n]o person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat."<sup>771</sup> Pursuant to this former version of the Fisheries Act, the Canadian Department of Fisheries and Oceans ("DFO") had a policy of requiring underwater dredgers to address possible loss of habitat due to dredging activities. The DFO supposed there were two areas of lost habitat due to dredging: the area from which dredged material is taken, and the area to which dredged material is deposited. DFO therefore required dredgers to make up for the supposed habitat loss by cultivating a new habitat area of equivalent biological productivity to both areas. However, there was anecdotal evidence that the dredge disposal areas were even more biologically productive than before when the dredged materials were deposited on them. If this were proven true, then DFO might no longer require restoration for the supposed loss of habitat in the dredge disposal area, thereby halving the overall habitat restoration requirement. Against this background, the Marine Dredge Disposal JIP aimed at evaluating the biological productivity of dredge disposal sites.

The Hibernia and Terra Nova operators would not have contributed to this JIP, even if it might have led to a reduction in the projects' habitat restoration obligations under the Fisheries Act. DFO's policy regarding habitat restoration was manageable for the operators to comply with. Moreover, at HMDC, the outcome of which would be uncertain. Even if it were proven that dredge disposal areas are more biologically productive, such a finding might still not convince DFO to amend the habitat restoration requirement. Given that HMDC's management would not have approved funding of this study in the ordinary course of its business. Likewise, I am unaware of any interest on Suncor's part in this type of study before it was raised at the HSE Workshop in 2012.

Moreover, an amendment to the Fisheries Act makes it exceedingly unlikely that the Hibernia and Terra Nova operators ever would have contributed to this JIP. The Fisheries Act was amended in 2013, such that the Section 35 now states that "no person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery."<sup>772</sup> As a result, DFO's focus has shifted away

<sup>&</sup>lt;sup>771</sup> **C-360,** Fisheries Act, R.S.C., 1985, c. F-14 (version of Section 35 from December 31, 2002 to June 28, 2012) (emphasis added).

<sup>&</sup>lt;sup>772</sup> **C-361,** Fisheries Act, R.S.C., 1985, c. F-14 (current version of Fisheries Act last amended on April 5, 2016) (emphasis added).

from *habitat* protection to *fisheries* protection, and it no longer imposes a habitat compensation requirement for dredging associated with the Hibernia subsea development. In view of this regulatory change, which had nothing to do with the Marine Dredge Disposal JIP, it is even less likely that the Hibernia or Terra Nova operators would ever see a need to fund a study like this.

# 46. Nuclear Magnetic Resonance to Detect Oil in and Under Ice (

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 62-64

Nuclear magnetic resonance ("NMR") imaging is a technique using strong magnetic fields, radio waves, and field gradients to form three-dimensional images of scanned objections. A common applied use of NMR technology is the Magnetic Resonance Imaging ("MRI") device used in medicine. In the has patented technology for NMR to detect oil under ice under laboratory conditions, and field testing had not yet been conducted.

is a professional service company that provides a range of services to projects offshore of Canada's East Coast, including seafloor mapping, geotechnical, geological and hydrographic surveys, and industrial surveys on land, in the air, or in the ocean. HMDC provided to PRNL in 2014<sup>773</sup> and in 2015<sup>774</sup> to enable to research the potential of a helicopter-based NMR tool to detect oil in and under ice.<sup>775</sup>

HMDC would not have done so in the absence of the Guidelines. Certainly, we would prefer to have additional technologies to detect and to locate oil spills in the rare event they ever occur. However, it is relatively uncommon for solid ice to form on the surface of the waters above where Hibernia extracts and transports oil. Thus, the NMR technology under research is not needed for Hibernia operations.

• See also CW-7, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements")

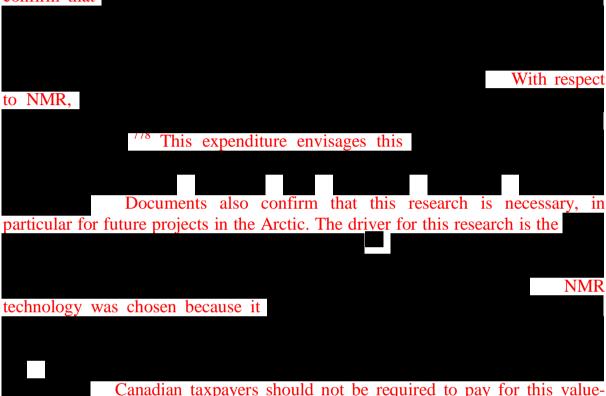
<sup>&</sup>lt;sup>773</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>774</sup> **C-216**, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

<sup>&</sup>lt;sup>775</sup> **C-255**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (January 30, 2014), *attaching* NMR to detect Oil in and under ICE R&D Work Expenditure Application Form.

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to development of technology to detect oil in and around ice in order to enhance ability to respond to oil spills. The Claimant alleges that this expenditure is compensable because it "is not needed for Hibernia operations" as "it is relatively uncommon for solid ice to form on the surface of the waters above where Hibernia extracts and transports oil".<sup>776</sup> The documents, however, confirm that



 $^{776}$  CW-3, Sampath Statement I ¶ 64. See also, **R-190**, Letter from Jeffrey Bugden, CNLOPB to K. Sampath, HMDC (Mar. 18, 2014).

<sup>777</sup> **C-255**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching NMR to detect Oil in and under ICE R&D Work Expenditure Application Form (Jan. 30, 2014), p. 1 (p. MOB0004949).

<sup>778</sup> *Ibid*.

<sup>779</sup> Ibid.

<sup>780</sup> Ibid.

<sup>781</sup> *Ibid*.

<sup>782</sup> *Ibid*.

added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasures...to minimize oil spills from ALPs and subsea components due to iceberg impact"<sup>783</sup> and for "research and development to improve the ability to detect and manage ice under adverse weather conditions be undertaken".<sup>784</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have incurred development of a potential technology that it did not need. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>785</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

### CW-10, Sampath Statement II ¶ 80

This project resulted from a workshop organized by **Sector**, whom I invited to St. John's to survey the local capabilities for R&D research. As I stated in paragraphs 32 through 38 of this statement, the fact that **Sector** had some limited involvement in this research does not show that it would have been funded by it, HMDC, or any Mobil affiliate in the absence of the Guidelines. Indeed, I am confident that this study would not have been funded, as the Hibernia GBS is located so far from shore that the formation of surface sea ice in the area is rare.<sup>786</sup> Moreover, this technology, if ever proven effective, could only be used in regions where surface ice formation can occur, and will likely be made available to all companies operating in such areas.

<sup>786</sup> *Id.* ¶ 64.

 $<sup>^{783}</sup>$  C-37, Hibernia Decision 86.01, p. 83, (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

<sup>&</sup>lt;sup>784</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>&</sup>lt;sup>785</sup> **C-2**, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

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- See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)
- See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")
- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

# 47.Offshore Operations Simulation Centre (\$4,400,000)

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶¶ 97-98

The Fisheries and Marine Institute (more commonly known as just the "Marine Institute") is a polytechnic school affiliated with MUN and located in the Province. The Marine Institute sought funding from HMDC for a new offshore operations simulator to supplement its existing facilities.<sup>787</sup> The newly built simulator would replicate the operating equipment of an anchor handling tug supply vessel and a platform supply vessel, and would be capable of recreating the effects of sea state, weather and ice conditions in real time.<sup>788</sup> Marine Institute would make the simulator available to industry for training personnel in the skills needed in day-to-day offshore operations.

In 2014, HMDC donated \$4.4 million to MUN to build the simulator proposed by Marine Institute.<sup>789</sup> The simulator would be made available generally to the industry as a whole. Normally, HMDC would expect its contractors to arrange for the proper training; it certainly would not fund the construction of a training simulator. It would make no sense for HMDC to donate the capital for an expensive piece of training equipment on these terms.

### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a donation to Memorial University for development of a simulator to be used to train personnel in offshore operations. The Claimant alleges that this expenditure is compensable because ordinarily HMDC would expect its contractors to arrange for training and would not fund the purchase of equipment that would be made available to industry as a whole.<sup>790</sup> However, there is no suggestion by any witness that the research and anticipated

<sup>&</sup>lt;sup>787</sup> **C-272**, Letter from **Control**, HMDC, to J. Bugden, CNLOPB (April 12, 2013), *attaching* Offshore Operations Simulation Centre R&D Work Expenditure Application Form.

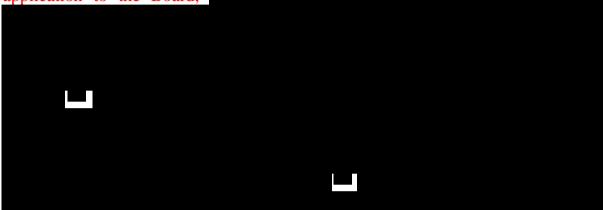
<sup>&</sup>lt;sup>788</sup> Id.

<sup>&</sup>lt;sup>789</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>790</sup> **CW-3**, Sampath Statement I ¶ 98.

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improvements are not necessary to and/or relevant to Hibernia, or the Claimant's other projects worldwide. The Claimant has not deducted from its claimed damages the expenses that would have accrued to Mobil under an "ordinary course" arrangement for similar R&D. Further, Jamie Long, president of HMDC, notes that this expenditure was made in order to "better prepare [HMDC's] workforce for the conditions they encounter offshore, and ensure they have the ability to practice operations in a controlled environment."<sup>791</sup> Documents confirm that this research was necessary. According to the expenditure application to the Board,



Additionally, the documents show that HMDC made the contribution in the manner that it did because it valued receipt of positive recognition for this contribution and

. HMDC then went

further and released a press release and received press coverage.<sup>796</sup> The Centre is

<sup>791</sup> **R-190**, Hibernia News Release, "Hibernia Offshore Operations Simulator Facility under Construction at Marine Institute" (Jan. 16, 2014), p. 1. Available at: <u>http://www.hibernia.ca/news/2014/MarineInstitute.pdf.</u>

<sup>792</sup> C-272, Letter from **Constant**, HMDC, to J. Bugden, CNLOPB, attaching Offshore Operations Simulation Centre R&D Work Expenditure Application Form (Apr. 12, 2013), p. 1 (p. MOB0005073). See also, **R-191**, Letter from Jeffrey Bugden, CNLOPB to **Constant**, HMDC (Apr. 22, 2013).

<sup>793</sup> *Ibid*.

<sup>794</sup> **R-192**, Letter of Agreement between HMDC and MUN for The Hibernia Offshore Operations Simulator Fund (Jul. 16, 2013), p. 21 (p. MICI 0003976).

<sup>795</sup> *Ibid*, p. 2 (p. MICI 0003948).

<sup>796</sup> **R-19**, Hibernia 2014 Benefits Report (2015), p. 11; **R-190**, Hibernia News Release, "Hibernia Offshore Operations Simulator Facility under Construction at Marine Institute" (Jan. 16, 2014); **R-**

now called the "Hibernia Offshore Operators Simulator". Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

Canada argues that HMDC would have committed to contribute **\$4.4 million** to the construction of a training facility at MUN. As Mr. Sampath explains in his first and second witness statements, Canada's position is simply not credible. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>797</sup>

#### CW-10, Sampath Statement II ¶¶ 110-113

This simulation center was established to train supply vessel crews. Canada believes "there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia, or the Claimant's other projects worldwide."<sup>798</sup> If it was not clear from my first witness statement, I convey this point now. As is the case at virtually any offshore project, the crews of the vessels that supply a given platform are not the project operator's employees. For this reason, I noted in my first statement that HMDC "certainly would not fund the construction of a training simulator" for its contractor's employees in the ordinary course of business.<sup>799</sup>

Canada's quotation of a statement by Jamie Long about preparing "[HMDC's] workforce", as Canada puts it, is imprecise.<sup>800</sup> The actual quotation by Mr. Long

**193**, Marine Institute News Release, "Marine Institute Officially Opens Hibernia Offshore Operations Simulator" (Oct. 30, 2015). Available at: <u>https://www.mi.mun.ca/news/title,30020,en.php;</u> **R-194**, Memorial University Gazette News Article, "Hibernia Offshore Operations Simulator Facility officially open" (Nov. 4, 2015). Available at: <u>https://issuu.com/memorialu/docs/mun\_gazette\_4\_nov\_2015\_fa\_issuu/1/</u>.

<sup>797</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>798</sup> *Id.* at A-68.

<sup>799</sup> **CW-3**, Sampath Statement I, at  $\P$  98.

<sup>800</sup> Counter Memorial Appendix A, at A-69 (quoting **R-190**, Hibernia News Release, "Hibernia Offshore Operations Simulator Facility under Construction at Marine Institute" (Jan. 16, 2014), p. 1).

says "our workforce."<sup>801</sup> By this, I take it that Mr. Long must be referring to the employees of the vessel contractors who supply the Hibernia GBS platform, as these are not HMDC employees.

Canada contends that vessel contractors face shortages in experienced crew officers and lack sufficient training opportunities.<sup>802</sup> Being a veteran of a different industry, I am not personally familiar with possible challenges that vessel contractors face in finding and training qualified crewmembers. However, these possible challenges would not have justified HMDC's \$4.4 million capital contribution to this simulation center to train the employees of not only its own vessel contractors, but also the employees of any vessel contractor that might wish to use the center.

Finally, any publicity gained by HMDC as a result of this contribution was small compared to the amount of the contribution. For this reason and those discussed at paragraphs 39 through 42 of this statement, I disagree with Canada's suggestion<sup>803</sup> that such potential publicity would have motivated HMDC to make this contribution in the Guidelines' absence.

<sup>&</sup>lt;sup>801</sup> **R-190**, Hibernia News Release, "Hibernia Offshore Operations Simulator Facility under Construction at Marine Institute" (Jan. 16, 2014), p. 1).

<sup>&</sup>lt;sup>802</sup> Counter Memorial Appendix A, at A-69 (citing C-272, Letter from **R&D**, HMDC, to J. Bugden, CNLOPB, attaching Offshore Operations Simulation Centre R&D Work Expenditure Application Form, and **R-192**, Letter of Agreement between HMDC and MUN for The Hibernia Offshore Operations Simulator Fund (Jul. 16, 2013)).

<sup>&</sup>lt;sup>803</sup> Counter Memorial Appendix A, at A-69 and A-70.

#### **48.**

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶¶ 115-116

C-CORE proposed in 2014 that HMDC fund a scoping study to estimate the cost of construction of provided to C-CORE to fund the scoping study, and in 2014 and 2015 incurred another in charged time for subject matter expert support.<sup>805</sup>

The concept of who would govern any eventual facility is not certain. What is clear, however, is that the facility facility would not be owned or directed by HMDC. In the ordinary course of business, HMDC would not fund a scoping study to conceptualize a multi-million dollar facility that it would not manage.

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to a study that explores the development of an **Development**. The Claimant alleges this expenditure is compensable because ordinarily HMDC would not fund a scoping study to conceptualize a facility that it would not manage.<sup>806</sup> However, according to the documents, it is not clear who will manage, own and operate the centre, and a

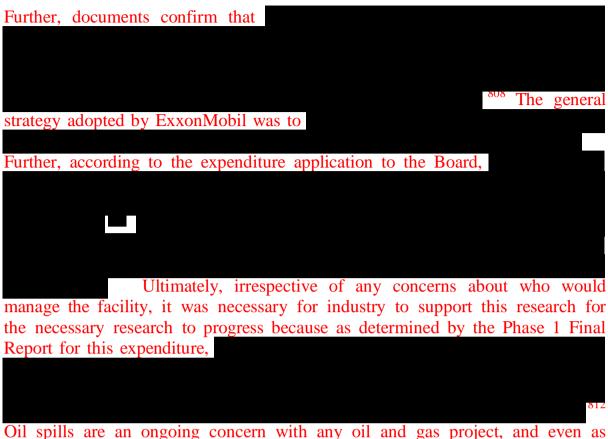
Further, there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia, or the Claimant's other projects worldwide. The Claimant has not deducted from its claimed damages the expenses that would have accrued to the Claimant under an "ordinary course" arrangement for similar R&D.

<sup>&</sup>lt;sup>804</sup> **C-284**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB (October 29, 2014), *attaching* Centre of Expertise, Oil Spill Response R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>805</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A; **C-251**, Hibernia January-April 2015 Board R&D Decisions, Appendix A; **C-216**, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

<sup>&</sup>lt;sup>806</sup> **CW-3**, Sampath Statement I ¶ 116.

<sup>&</sup>lt;sup>807</sup> **R-196**, C-CORE, Agenda, Minutes & Action Log-Final (Jul. 15, 2015), p. MICI 0004097.



Oil spills are an ongoing concern with any oil and gas project, and even as recently as 2015 in Newfoundland, Hibernia faced charges for oil spills.<sup>813</sup>

<sup>809</sup> *Ibid*.

<sup>810</sup> C-284, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB, attaching R&D Work Expenditure Application Form (Oct. 29, 2014), p. 3 (p. MOB0005286).

<sup>811</sup> *Ibid*, p. 1 (p. MOB0005284).

<sup>812</sup> **R-196**, Arctic and Cold Oceans OSR Laboratory Facility – Phase 1 Final Report (Undated), p.
6.

<sup>813</sup> **R-197**, CTV News Article, "Hibernia faces charges following oil leak from offshore N.L. platform" (May 22, 2015). Available at: <u>http://www.ctvnews.ca/business/hibernia-faces-charges-following-oil-leak-from-offshore-n-l-platform-1.2386504</u>; **R-198**, The Telegram News Article, "Courts begin to tackle Hibernia oil spill" (Jun. 9, 2015). Available at: <u>http://www.thetelegram.com/Business/2015-06-09/article-4175246/Courts-begin-to-tackle-Hibernia-oil-spill/1.</u>

<sup>&</sup>lt;sup>808</sup> **R-131**, Presentation, Newfoundland and Labrador R&D, Offshore & Environment Function Environmental Technology Section: Opportunities and Initial Impressions (Feb. 7, 2014), slide 2 (p. MICI 0004755).

Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long- standing commitment in the Hibernia 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."<sup>814</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have funded this scoping study. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>815</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

# CW-10, Sampath Statement II ¶¶ 125-127

Canada argues that "there is no suggestion by any witness" that this scoping study for a possible center was "not necessary to and/or relevant to Hibernia or the Claimant's other projects worldwide."<sup>816</sup> If it was not clear from my first witness statement, this scoping study is definitely not relevant to Hibernia or to any worldwide project in which a Mobil affiliate may have an interest.

That may have lent its expertise to this scoping study does not indicate it would have been undertaken in the ordinary course of business, as Canada suggests,<sup>817</sup> for the reasons I give at paragraphs 32 through 38 of this statement. Would not have associated with this project but for HMDC's financial contribution, this financial contribution being possible only because HMDC needed to fund activities eligible for credit under the Guidelines.

<sup>816</sup> *Id.* at A-70.

<sup>817</sup> *Id.* at A-70 to A-71.

<sup>&</sup>lt;sup>814</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>815</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

Canada quotes an excerpt from the scoping study's final report, which notes that would be necessary for a center like this to be viable.<sup>81</sup> On a point of correction, this report was issued at the conclusion of a separate JIP coordinated thorough PRNL, which I discussed earlier in this witness statement.<sup>819</sup> In any event, Canada has interpreted this document as signifying "it was necessary for industry to support this research for the necessary research to progress."<sup>820</sup> This interpretation is not accurate. The scoping study for an in-Province

center was not necessary, particularly in view of already established centers worldwide that provide this type of research and service.

• See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")

<sup>&</sup>lt;sup>818</sup> *Id.* at A-72 (citing **R-196**, Arctic and Cold Oceans OSR Laboratory Facility – Phase 1 Final Report (Undated), p. 6).

<sup>&</sup>lt;sup>819</sup> See paragraphs 34 through 95, above.

<sup>&</sup>lt;sup>820</sup> Canada Counter Memorial Appendix A, at A-71.

#### 49. Personal Locator Beacon (

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#### A. First Witness Statement(s)

#### CW-7, Durdle Statement I ¶ 35

This project is designed to support development of a personal locator beacon device that is superior to current devices.<sup>821</sup> This project effectively involved paying money to Canatec, a contractor, to design and develop a new personal locator beacon.<sup>822</sup> Had this expenditure been required by commercial needs, it would have been put out for bidding or HMDC would have obtained the technology 'off the shelf' (as was the case with the aviation flight suits mentioned above). It was uneconomical and impractical to fund Canatec's research and development of a better beacon, especially since

At most, HMDC

-which would, but for the Guidelines, represent a relatively small gain for HMDC's investment. HMDC's normal process for such an item would be to develop a specification and go to the market to obtain the technology through a formal competitive bid process, allowing the market to develop and provide the technology.

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to the development of technology to improve the ability to track personnel. The Claimant alleges this expenditure is compensable because ordinarily HMDC would have put the design and development of the beacon out for bidding or obtained the technology "off the shelf" rather than fund a contractor's R&D.<sup>823</sup> However, there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia, or the Claimant's other projects worldwide. The Claimant has not deducted from its claimed damages the expenses that would have accrued to the Claimant under an "ordinary course" arrangement for similar R&D.

<sup>&</sup>lt;sup>821</sup> **C-220**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (Sept. 26, 2013), *attaching* R&D Work Expenditure Application related to Personal Locator Beacon Development Project.

<sup>&</sup>lt;sup>822</sup> Id.

<sup>&</sup>lt;sup>823</sup> **CW-7**, Durdle Statement I ¶ 35.

According to documents, this research was relevant because Additionally, the documents show that HMDC made the contribution in the manner that it did because it valued receipt of positive recognition for this contribution and

Canadian taxpayers should not be required

to compensate the Claimant for this value-added R&D. The Claimant has a longstanding commitment in the Hibernia 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."<sup>826</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority further recognized that not all safety-related expenditures would have been undertaken even in the absence of the Guidelines.<sup>827</sup> Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have provided over so that a contractor could develop its proprietary technology. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>828</sup> Mr. Durdle's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

#### CW-12, Durdle Statement II ¶¶ 21-22

<sup>827</sup> Id. ¶ 76-78.

<sup>&</sup>lt;sup>824</sup> **C-220**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Personal Locator Beacon Development Project" (Sep. 26, 2013), p. MOB0004322.

<sup>&</sup>lt;sup>825</sup> **R-199**, Letter of Agreement between HMDC and Canatec for Personal Locator Beacon Development Project (Nov. 18, 2013), p. 2 (p. MICI 0004180).

<sup>&</sup>lt;sup>826</sup> C-37, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>828</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

The essence of this project was for HMDC to pay Canatec, a contractor, to design and develop a next-generation personal locator beacon ("PLB").<sup>829</sup> Canada argues that there is no indication that this expenditure is irrelevant or unnecessary to Hibernia or to other projects.<sup>830</sup> To be clear, the existing personal locator beacons used at the Hibernia project, which were procured in the marketplace, met all applicable standards. During my time as safety supervisor, the Board never raised a concern about the PLBs used. As for Canada's comment on the relevance of this expenditure, I do not disagree than an improvement in any safety-related technology could be, in some sense, relevant to the Hibernia project. But as I explained in my first witness statement, it does not make business sense for HMDC alone to pay for improved technologies that its contractor will then own.<sup>831</sup> But for the need to make Guidelines-eligible expenditures, HMDC would not have entered into this sort of arrangement.

Canada additionally argues that HMDC funded this project "because it valued receipt of positive recognition for this contribution and "<sup>832</sup> As with the expenditure for the Safety Oversight Management System software, HMDC's expenditure of over to fund the development of a new beacon by a private contractor is wholly disproportionate to any positive recognition that HMDC might garner. Moreover, beyond a passing reference to this R&D project in HMDC's 2015 public benefits report, <sup>833</sup> I am unaware of any publicity concerning HMDC's financial contribution.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>&</sup>lt;sup>829</sup> **CW-7**, Durdle Statement I ¶ 35.

<sup>&</sup>lt;sup>830</sup> Counter Memorial Appendix A, at A-72.

 $<sup>^{831}</sup>$  CW-7, Durdle Statement I  $\P$  35.

<sup>&</sup>lt;sup>832</sup> Counter Memorial Appendix A, at A-73.

<sup>&</sup>lt;sup>833</sup> **C-355**, HMDC, Canada-Newfoundland and Labrador Benefits Report January 1 – December 31, 2015 (Undated), at p. 9-10.

)

# 50.R&D Applications of Iceberg Profiling (

# A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 113-114

This project builds on a 2012 project that collected three-dimensional profiling data of offshore icebergs.<sup>834</sup> In 2014, HMDC contributed to C-CORE for this follow-up project, which involves using the iceberg profiling data collected from the original project to enhance iceberg simulation models.<sup>835</sup>

In the absence of the Guidelines, HMDC would not have funded the follow-up project, which is essentially academic in nature. If developing detailed, threedimensional profiles of icebergs was of interest, HMDC would have done so years ago.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves")

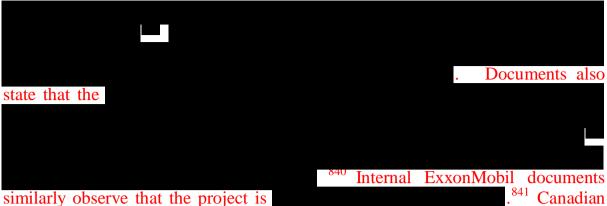
# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to the development of iceberg simulation models. The Claimant alleges this expenditure is compensable because this project is "essentially academic in nature" and if it had been of interest to HMDC it would have been undertaken "years ago".<sup>836</sup> However, documents confirm that

<sup>&</sup>lt;sup>834</sup> I understand that Mobil does not claim the costs of this original project, as they were incurred to satisfy a **sector of the sector** legacy fund obligation to the Province arising from the Hibernia Southern Extension and are outside the scope of this arbitration.

<sup>&</sup>lt;sup>835</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A; **C-283**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB (May 13, 2014), *attaching* R&D Applications of Iceberg Profiles R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>836</sup> **CW-3**, Sampath Statement I ¶ 114.



taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long- standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported." <sup>842</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have paid C-Core over for a study that it did not need. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>843</sup> Mr. Sampath's additional testimony in his second

<sup>&</sup>lt;sup>837</sup> **C-283**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB, attaching R&D Applications of Iceberg Profiles R&D Work Expenditure Application Form (May 13, 2014), p. 2 (p. MOB0005242).

<sup>&</sup>lt;sup>838</sup> *Ibid*, p. 25 (p. MOB0005273).

<sup>&</sup>lt;sup>839</sup> *Ibid*, p. 5 (p. MOB0005253).

<sup>&</sup>lt;sup>840</sup> *Ibid*, p. 1 (p. MOB0005241).

<sup>&</sup>lt;sup>841</sup> **R-200**, EMC R&D Screening Committee Presentation (Jul. 29, 2011), slide 8 (p. MICI 0004631).

<sup>&</sup>lt;sup>842</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>&</sup>lt;sup>843</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

# CW-10, Sampath Statement II ¶ 124

Canada appears to imply that association with this project involving the three-dimensional profiling of icebergs must signify that it or another ExxonMobil affiliate would have funded it in the ordinary course of business.<sup>844</sup> For the reasons stated at paragraphs 32 through 38 of this statement, this is not true. Possibly, was interested in continuing the project with HMDC's financial support given its involvement with the initial phase of the project, However, I am confident that the

enhancement phase of the iceberg profiling project that was funded by HMDC would have fallen beneath the priority level to merit **and** own financial support; profiling icebergs is an academic undertaking with no commercial application. Even if this initiative had value, for the reasons discussed at 27 through 31 of this statement, **between the statement** would not ordinarily have funded it through HMDC and thereby release the results to its competitors.

- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)
- See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")

<sup>844</sup> *Id.* at A-74.

# **51.Red Cross Centre (\$100,000)**

# A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 146-147

I understand that in Mobil I, the Claimants claimed that HMDC's 2010 contribution to Red Cross was an incremental expenditure, which Canada ultimately did not contest.<sup>845</sup> This contribution was made for the construction of an emergency response and preparedness training center in St. John's.<sup>846</sup>

In 2014, HMDC made a further contribution of \$100,000 to the Red Cross for completion of the same facility.<sup>847</sup> As with the 2010 contribution, but for the Guidelines, HMDC would not have made this contribution.

# **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that this "community contribution" is compensable because it would not have been undertaken in the absence of the 2004 Guidelines.<sup>848</sup> The documents, however, show that HMDC valued receipt of positive recognition for this contribution and

[HMDC publicize its support] is expected".<sup>849</sup> The documents also indicate the benefits of the project:

<sup>845</sup> **C-2**, Mobil I Award ¶ 128.

<sup>846</sup> **C-310**, Hibernia Red Cross Infrastructure Donation R&D Work Expenditure Application Form (Aug. 2. 2010).

<sup>847</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix B.

<sup>848</sup> **CW-3**, Sampath Statement I ¶¶ 132, 147.

<sup>849</sup> **R-201**, Letter of Agreement between HMDC and Canadian Red Cross for Emergency Response Preparations – Red Cross (Nov. 18, 2010), p. MICI 0004207.

<sup>850</sup> As

Paul Leonard, President of HMDC has spoken publicly in support of this expenditure and taken credit for it on behalf of HMDC: "Safety is core to how we conduct our business at Hibernia...Since this major initiative of the Canadian Red Cross is ultimately about the safety of people throughout Newfoundland and Labrador, we are pleased to be able to offer this support."<sup>851</sup> Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

The incremental nature of HMDC's contributions to the Red Cross Centre is *res judicata* and cannot be questioned in this proceeding. In the Mobil I Arbitration, Canada accepted that Mobil "provided sufficient evidence" that this community contribution was incremental. <sup>852</sup> The Mobil I Majority decided that this contribution was an incremental expenditure based on Canada's acceptance. <sup>853</sup> Canada does not address its prior acceptance, much less does it dispute the Mobil I Majority's final disposition on the incremental nature of this expenditure.

While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-10, Sampath Statement II ¶¶ 139-141

<sup>853</sup> **C-2**, Mobil I Award ¶¶ 128-129 & n. 162.

<sup>&</sup>lt;sup>850</sup> **C-310**, Letter from **Constant and Constant and Con** 

<sup>&</sup>lt;sup>851</sup>**R-202**, The Packet News Article, "Red Cross unveils disaster preparedness campaign" (Feb. 8, 2011), p. 2. Available at: <u>http://www.thepacket.ca/Latest-news/2011-02-08/article-2208512/Red-Cross-unveils-disaster-preparedness-campaign--/1</u>.

<sup>&</sup>lt;sup>852</sup> C-389, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Canada's Rejoinder on Damages (January 25, 2013, at ¶ 123 n.267. See also C-390, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Second Post-Hearing Report of Richard E. Walck (January 25, 2013), Annex I, at p. 7.

# **Public Version**

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

••••

• Red Cross Centre;<sup>854</sup>

• • • •

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>855</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>856</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>857</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>856</sup> Id.

<sup>&</sup>lt;sup>854</sup> **CW-3**, Sampath Statement I ¶¶ 146-147.

<sup>&</sup>lt;sup>855</sup> *Id.* ¶ 133.

<sup>&</sup>lt;sup>857</sup> *Id.* ¶ 132. See also paragraphs 39 through 42, above.

# 52. Remote Underdeck Inspection System (

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶ 91

In 2012, HMDC gave to MUN to support a class design project.<sup>858</sup> This payment was made when my predecessor, was still serving as HMDC's R&D Manager. I understand from him that this expenditure was authorized because Hibernia was subject to the spending requirement of the Guidelines. I am not aware that HMDC had ever before funded a class project.

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# **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to a contribution to a Memorial University class design project for the development of the system concept, design and tools required to remotely conduct the underdeck inspections on the Hibernia platform. The Claimant alleges that this expenditure is compensable because the Hibernia owners would not have approved this contribution to MUN in the absence of the Guidelines.<sup>859</sup> The documents, however, clearly state that the success of the project will result in the following benefits:



Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

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<sup>&</sup>lt;sup>858</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B.

<sup>&</sup>lt;sup>859</sup> **CW-3**, Sampath Statement I ¶ 81.

<sup>&</sup>lt;sup>860</sup> **R-203**, Letter from **Berline**, HMDC to Jeff Bugden, CNLOPB attaching Remote Underdeck Inspection System R&D/E&T Work Expenditure Application Form (Jun. 6, 2012), p. 5.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have paid any amount for this class design project, or any one like it. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>861</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

# CW-10, Sampath Statement II ¶ 106

As I explained in my first witness statement, HMDC gave to MUN to support this class design project.<sup>862</sup> This class design project was inspired by, but distinct from, a much larger projected funded by HMDC for development of an underdeck inspection system.<sup>863</sup> In quoting the pre-approval application for this larger project, it appears Canada has conflated it with the class design project in question. In any event, as I noted in my first witness statement, my predecessor coordinated the expenditure on the class design project because it was credited toward the Hibernia project's expenditure obligations under the Guidelines.<sup>864</sup>

<sup>&</sup>lt;sup>861</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>862</sup> See **CW-3**, Sampath Statement I, at ¶ 91.

<sup>&</sup>lt;sup>863</sup> See **R-203**, Letter from **Mathematic**, HMDC to Jeff Bugden, CNLOPB attaching Remote Underdeck Inspection System R&D/E&T Work Expenditure Application Form (Jun. 6, 2012).

<sup>&</sup>lt;sup>864</sup> See **CW-3**, Sampath Statement I, at  $\P$  91.

# 53. Rovers Search and Rescue Infrastructure Contribution (\$109,000)

# A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 144-145

In 2011, HMDC made a contribution to Rovers Search and Rescue, a not-for-profit organization run by volunteers, for the construction of a permanent onshore facility located in Paradise, Newfoundland.<sup>865</sup> In the Mobil I arbitration, I understand Canada ultimately did not contest that this expenditure was incremental, and the Tribunal awarded damages based on it.<sup>866</sup>

As a continuation of the original funding, HMDC made an additional contribution in 2012 of \$109,000 to Rovers for completion of the facility.<sup>867</sup> As with the original contribution, the 2012 contribution to Rovers would not have been made in the absence of the Guidelines.

# **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that this expenditure is compensable because it would not have been made in the absence of the 2004 Guidelines.<sup>868</sup> The documents, however, show that



<sup>865</sup> **C-189**, Letter from J. Bugden, CNLOPB, to W.P. Swett, HMDC (June 7, 2012), *attaching* 2011 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations, Appendix B.

<sup>866</sup> **C-2**, Mobil I Award ¶ 128.

<sup>867</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B.

<sup>868</sup> **CW-3**, Sampath Statement I ¶ 144-145.

<sup>869</sup> **R-204**, Letter from HMDC to Jeff Bugden, CNLOPB attaching Rovers Search and Rescue Infrastructure Donation R&D/E&T Work Expenditure Application Form (Sep. 12, 2011), p. MICI 0004217.

HMDC's president, Jamie Long, also made public statements about this expenditure and received press coverage stating that "Hibernia is proud to support and help the volunteers" and that they "understand the importance of having the right training to do the job...[and] are impressed with the services they provide voluntarily to the region and are pleased to provide this financial support."<sup>870</sup>

Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

The incremental nature of HMDC's contributions to the Rovers Search and Rescue is *res judicata* and cannot be questioned in this proceeding. In the Mobil I Arbitration, Canada accepted that Mobil "provided sufficient evidence" that this community contribution was incremental.<sup>872</sup> The Mobil I Majority decided that this contribution was an incremental expenditure based on Canada's acceptance.<sup>873</sup>

<sup>&</sup>lt;sup>870</sup> 351 **R-205,** The Telegram News Article, "Rovers to set up shop in Paradise" (May 14, 2012), p. 2. Available at: <u>http://www.thetelegram.com/News/Local/2012-05-14/article-2978590/Rovers-to-set-up-shop-in-Paradise/1</u>; **R-206**, Hibernia News Release, "Rovers Search and Rescue Team of Northeast Avalon improving volunteer training thanks to a \$600,000 contribution from Hibernia" (Jul. 9, 2012), p. 2. Available at: <u>http://www.hibernia.ca/news/2012/rovers.pdf.</u>

<sup>&</sup>lt;sup>871</sup> **R-200**, EMC R&D Screening Committee Presentation (Jul. 29, 2011), slide 7 (p. MICI 0004630).

<sup>&</sup>lt;sup>872</sup> C-389, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Canada's Rejoinder on Damages (January 25, 2013, at ¶ 123 n.267. See also C-390, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Second Post-Hearing Report of Richard E. Walck (January 25, 2013), Annex I, at p. 7.

<sup>&</sup>lt;sup>873</sup> **C-2**, Mobil I Award ¶¶ 128-129 & n. 162.

Canada does not address its prior acceptance, much less does it dispute the Mobil I Majority's final disposition on the incremental nature of this expenditure.

While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

••••

• Rovers Search and Rescue Infrastructure Contribution;<sup>874</sup>

••••

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>875</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>876</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>877</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that

<sup>875</sup> *Id.* ¶ 133.

<sup>876</sup> Id.

<sup>&</sup>lt;sup>874</sup> **CW-3**, Sampath Statement I ¶¶ 144-145.

<sup>&</sup>lt;sup>877</sup> *Id.* ¶ 132. See also paragraphs 39 through 42, above.

were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

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# 54. Safety Oversight Management System (

# A. First Witness Statement(s)

#### CW-7, Durdle Statement I ¶¶ 33-34

This project is designed to automate the Board's safety and certification management system by creating an electronic web-enabled database for reporting and managing safety incidents.<sup>878</sup> The software includes features for the tracking, trending, and analysis of such incidents.

At the time of the proposal of this project, the Board lacked a database for logging all safety incidents. This project would develop a software database in which operators could enter directly to input the required information.

There was no commercial need for HMDC to fund the creation of this software system, nor was there a commercial reason why HMDC alone, among the other operators in Newfoundland, would fund the creation of the Board's software system. Simply put, there was no requirement for HMDC to make this expenditure, except that it satisfied HMDC's spending requirements under the Guidelines,<sup>879</sup> and it would likely never yield any direct commercial benefit to HMDC in the future—the economic value of such a project is simply not there, especially when you apply reasonable project-evaluation criteria.

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to research into the creation of an electronic web enabled database which would eliminate inefficiencies with current reporting processes in use at the CNLOPB and enable analysis of incidents to identify trends and risk areas requiring more safety focus. The Claimant alleges that this "safetyrelated" expenditure is compensable because it would not have been undertaken in the absence of the Guidelines given the standard health and safety practices

<sup>879</sup> **C-219**, Letter from J. Bugden, CNLOPB, to , HMDC (Aug. 1, 2013).

<sup>&</sup>lt;sup>878</sup> **C-218**, Letter from **C-218**, HMDC, to J. Bugden, CNLOPB (June 27, 2013), *attaching* R&D Work Expenditure Application related to CNLOPB Incident Reporting/Analysis & Certification Database.

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followed at Hibernia and Terra Nova.<sup>880</sup> However, the documents state that <sup>82</sup> The "existing technology in use at the C-NLOPB does not allow for electronic transfer of information to record, monitor and access safety incidents". <sup>883</sup> Additionally, the documents show that HMDC made the contribution in the manner that it did because it valued receipt of positive recognition for this contribution and "<sup>884</sup> Canadian taxpayers should not be required to compensate the Claimant for this value-added safety- related expenditure. The Claimant has failed to prove with reasonable certainty that this

#### C. Mobil's Response And Further Witness Testimony

Canada offers no credible explanation for why a single operator would pay toward a software upgrade for its regulator. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>885</sup> Mr. Durdle's additional testimony in his

expenditure is compensable.

<sup>881</sup> **C-218**, Hibernia R&D Project Abstract, Project – CNLOPB Incident Reporting / Analysis & Certification Database (Undated), p. MOB0004310.

<sup>882</sup> **R-207**, E-mail from Jamie Long, HMDC to **100**, K. Sampath and **100** (Dec. 4, 2013), p. MICI 0004251.

<sup>883</sup> **C-218**, Hibernia R&D Project Abstract, Project – CNLOPB Incident Reporting / Analysis & Certification Database (Undated), p. MOB0004310.

<sup>884</sup> **R-208**, Letter from K. Sampath, HMDC to M.I. Wager, MWCO and MWCO-NL attaching Letter of Agreement for the Certification and Safety Management Oversight System Development Project and Financial Proposal prepared by MWCO (Nov. 21, 2013), p. MICI 0004230.

<sup>885</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>880</sup> **CW-7**, Durdle Statement I ¶ 16.

second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

# CW-12, Durdle Statement II ¶¶ 17 – 20

As I noted in my first witness statement,

the incident reporting and tracking software to be developed for the Board. <sup>6</sup> Of course, HMDC is not in the business of voluntarily paying for its regulator's technology upgrades, much less when the other operators subject to the regulator's oversight are not also contributing financially.<sup>887</sup> If HMDC decided for its own reasons to fund the development of a software package for the Board, it would have conducted a market search for commercially available alternatives at reasonable cost.<sup>888</sup> I am confident that the price tag for developing this software would have been far less than **1** if HMDC were responsible for selecting the scope and contractor for this project.

Canada references an email from HMDC's president at the time, Jamie Long, stating that

.<sup>889</sup> I do not know where Mr. Long got this idea from. This software development project was focused on creating an incident reporting and tracking database, as reflected in the work expenditure application for this project.<sup>890</sup> Any connection between this goal and would be tenuous.

Canada additionally argues that HMDC paid for this software development project "because it valued receipt of positive recognition for this contribution and

<sup>886</sup> **CW-7**, Durdle Statement I ¶ 33.

<sup>887</sup> *Id.* ¶ 34.

<sup>888</sup> **R-207**, Email from (ExxonMobil Canada) to K. Sampath (HMDC) of December 3, 2013, at MICI0004251.

<sup>889</sup> Counter Memorial Appendix A, at A78 to A-79 (**R-207**, E-mail from Jamie Long, HMDC to , K. Sampath and (Dec. 4, 2013), p. MICI 0004251).

<sup>890</sup> **C-218**, Letter from **C-218**, HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "CNLOPB Incident Reporting/Analysis & Certification Database", at MOB0004310.

."<sup>891</sup> Certainly, HMDC did not make this control outlay for the purpose of garnering positive recognition, the value of which would be slight in comparison to the magnitude of the outlay. Moreover, I am not aware of any actual public recognition of HMDC's financial contribution. In fact, in the Board's 2014-2015 Annual Report, the Board publicizes that it hired the contractor to develop this software, but HMDC's contribution is not mentioned.<sup>892</sup>

I confirmed with HMDC's current safety supervisor, **and the software** package was never developed despite HMDC's expenditure of **and the software** in 2014. Thus, none of the operators, including HMDC, has gotten any value out of this expenditure.

<sup>&</sup>lt;sup>891</sup> Counter Memorial Appendix A, at A-79.

<sup>&</sup>lt;sup>892</sup> **C-354**, CNLOPB, Annual Report 2014-2015 (June 26, 2015), at p. 12.

#### 55.SARA & Metal Analysis (

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# A. First Witness Statement(s)

#### CW-5, Noseworthy Statement I ¶¶ 29-31

Saturates, Asphaltenes, Resins and Aromatics ("SARA") and metal analysis essentially involves taking a sample of oil, sending it to a laboratory, and having it thoroughly analyzed. This is work that HMDC has long undertaken in the ordinary course of business. Before the implementation of the Guidelines, we carried out this work with a laboratory contractor in Alberta called Corelabs.<sup>893</sup> Once the Guidelines were implemented, however, we decided to move the work to a laboratory in Newfoundland as a means of gaining credit for Guidelines-eligible R&D work.

Unfortunately, only one local laboratory was even remotely capable of performing the analysis we required: Petroforma. Before we could switch to Petroforma, we had to ensure that it had all of the laboratory equipment necessary to perform the required analysis. Of course, Corelabs already owned this equipment, so we in effect donated duplicate equipment to Petroforma. Obviously, we do not buy equipment for our contractors in the ordinary course of business. These expenditures show the distorted business practices HMDC has been forced to adopt as a result of the Guidelines.

I understand that the tribunal in Mobil I awarded compensation based on HMDC's costs for the purchase of the equipment for Petroforma to perform SARA and metals analysis.<sup>894</sup> I also understand that during the period of time at issue in the pending NAFTA arbitration, HMDC continued to expend money on the purchase of laboratory equipment for Petroforma.<sup>895</sup>

<sup>&</sup>lt;sup>893</sup> **C-331**, Hibernia R&D / E&T Project Abstract: Local SARA & Metal Analysis Capacity – Capability (Petroforma), at p. 1.

<sup>&</sup>lt;sup>894</sup> C-2, Mobil I Award ¶¶ 97-100.

<sup>&</sup>lt;sup>895</sup> **C-206**, Hibernia May-December 2012 Board R&D Decisions, Appendix B (\$159,712).

# **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to the relocation of laboratory work which was previously executed in Alberta, as well as the funding of additional laboratory equipment and research studies. The Claimant alleges that this expenditure is compensable because although this is work that HMDC has long undertaken in the ordinary course of business, before the implementation of the 2004 Guidelines, it carried out this work with a laboratory contractor in Alberta called Corelabs. Once the 2004 Guidelines were implemented, they decided to move the work to a laboratory in Newfoundland.<sup>896</sup> The Claimant fails, however, to admit the long-term benefits of this move, such as reducing wait times and costs as a result of having a local laboratory perform this work for them. As the documents show, the resulting contract will

This is further supported by

public documents which state that "[w]ith the continued advancement of petroleum developments, such as Hebron, White Rose expansion, Hibernia South...there is an increased need for related services" and that this is "a crucial service that used to take six to eight months and cost much more, as companies had to ship offshore samples to Alberta, Houston or Norway now, the same process takes three to four weeks [in comparison to six to eight months]."<sup>898</sup> The project is thus of benefit to Hibernia as well as the Claimant's other projects in the offshore area. Canadian taxpayers should not have to compensate the Claimant for this value-added R&D. Moreover, the Claimant does not provide any breakdown of expenses to support its claim that it has purchased a "laboratory" to facilitate the work.<sup>899</sup> The Claimant taxpayers and promote further research and development in Canada to solve problems unique to the Canadian

<sup>896</sup> **CW-5**, Noseworthy Statement I ¶ 29.

<sup>897</sup> **C-331**, Hibernia R&D/E&T Project Abstract: HMDC 11-02 Local SARA & Metal Analysis Capacity-Capability (Petroforma), p. 2 (p. MOB0006016).

<sup>898</sup> **R-209**, Government of Newfoundland and Labrador News Release, "Company Offers Strategic Technical Service to Oil Industry with Support from Province" (Sep. 15, 2009). Available at: <u>http://www.releases.gov.nl.ca/releases/2009/business/0915n05.htm.</u> **R-210**, The Telegram News Article, "We were all pretty much scared to death" (Mar. 31, 2012). Available at: <u>http://www.thetelegram.com/Business/2012-03-31/article-2944212/We-were-all-pretty-much-scared-to-death/1.</u>

<sup>899</sup> **CW-5**, Noseworthy Statement I ¶31.

offshore environment." <sup>900</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

The incremental nature of the annual contributions to the SARA & Metal Analysis laboratory is *res judicata* and cannot be questioned in this proceeding. The Mobil I Majority held as follows:

The Majority finds that the Claimants have proven that these expenditures are incremental. The evidence offered by the Claimants that this project was moved to Newfoundland so that it would be Guidelines-compliant (combined with the timing of this move) indicates a clear causal link with the Guidelines. The fact that the analysis has been conducted for some time elsewhere is irrelevant in light of the fact that the Claimants claim only the cost of transferring the expenditure to the Province.<sup>901</sup>

Canada does not address, much less dispute, the Mobil I Majority's final disposition on the incremental nature of the SARA & Metal Analysis laboratory expenditure. While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Noseworthy's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

Noseworthy Statement II ¶¶ 33-35

As discussed in my first witness statement, this expenditure involved the procurement of equipment for a local laboratory contractor, Petroforma, so that Petroforma could perform analysis on oil samples that until that point had been performed by another contractor in Alberta called Corelabs.<sup>902</sup> Canada asserts that HMDC's procurement of Petroforma's laboratory equipment yielded "long-term benefits . . . such as reducing wait times and costs as a result of having a local

<sup>&</sup>lt;sup>900</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>&</sup>lt;sup>901</sup> C-2, Mobil I Award, ¶ 100 (footnotes omitted).

<sup>&</sup>lt;sup>902</sup> **CW-5**, Noseworthy Statement I ¶¶ 29-30.

laboratory perform this work[.]"<sup>903</sup> Certainly, if HMDC could trust that the local laboratory contractor had the necessary equipment and required skills, then all other things being equal, HMDC would prefer the local contractor. But the whole point of HMDC's contribution to setting up Petroforma's laboratory was that Petroforma lacked the necessary equipment and required skills at the time without the expenditure. HMDC would not have spent the money to build the capacity of a contractor like Petroforma—particularly when HMDC previously had no commercial relationship with that contractor and the services of another contractor were satisfactory.

In fact, HMDC has gotten very little benefit out of its donation of laboratory equipment to Petroforma. Soon after Petroforma began performing the sample testing services for HMDC,



Canada comments that it does not have a breakdown of expenses to show that HMDC purchased a laboratory for Petroforma's work.<sup>904</sup> In fact, HMDC reported to the Board that this expenditure was for "[f]unding of laboratory analysis equipment to increase experimental capacity and aid technology transfer."<sup>905</sup> This expenditure is consistent with the Board's pre-approval letter, which limited eligible expenditures associated with this R&D project to procurement of "additional laboratory analysis equipment at Petroforma's facility" and "training programs for students and trade persons conducted at the facility."<sup>906</sup>

<sup>904</sup> Id.

<sup>906</sup> **C-362,** Letter from Jeffrey Bugden (C-NLOPB) to (HMDC) of June 6, 2011, "R&D/E&T Work Expenditure Application: HMDC 11-02 Local SARA & Metal Analysis Capacity-Capability (Petroforma)".

<sup>&</sup>lt;sup>903</sup> Counter Memorial Appendix A, at A-80.

<sup>&</sup>lt;sup>905</sup> C-206, Hibernia May-December 2012 Board R&D Decisions, Appendix B, at p. MOB0003520.

# 56.

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶¶ 123-124

The provincial Research and Development Corporation of Newfoundland and Labrador ("RDC") provided initial funding to CARD for a project entitled

The purpose of this project was to study
the Labrador coast, and thereby calibrate and validate
. For the field data component, CARD would
in an area offshore Potsville, Labrador,
CARD requested that HMDC provide additional
funding beyond the original amount donated by RDC in order to expand the field
data component of the project. <sup>908</sup> With this additional funding, CARD proposed to

HMDC contributed **1** in 2014 to this expansion component of the project.<sup>909</sup> In the ordinary course of business, HMDC would not have done so. Notably, it was CARD who first approached HMDC with the idea of expanding this project, not the other way around. Project operators do not ordinarily fund unsolicited research projects that other organizations have already conceived and initiated. Moreover, the Hibernia field is located off of the Newfoundland coast, not Labrador. The data collected from this study will not benefit the Hibernia project.

• See also **CW-3**, Sampath Statement I ¶¶ 117-119 (explaining that the recipient institution, CARD, was created to enable the Hibernia and Terra Nova projects to make sufficient Guidelines-eligible expenditures, meaning that "[b]ut for the Guidelines, the HMDC and Suncor would not have funded CARD or any of its research projects").

Expenditure Application Form.

<sup>908</sup> Id.

<sup>&</sup>lt;sup>907</sup> **C-290**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (March 10, 2014), *attaching* R&D Work

<sup>&</sup>lt;sup>909</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

R&D/E&T Work

# **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to R&D to study the . The Claimant alleges that this expenditure is compensable because the data collected from the study will not benefit Hibernia since Hibernia is located off of the Newfoundland coast, . <sup>910</sup> The documents, however, show that
The documents further show that
. <sup>915</sup> The project is thus of benefit to the Claimant's other
projects in the offshore area. Additionally, the documents show that HMDC
made the contribution because it valued receipt of positive recognition for this
contribution and

Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long- standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse

<sup>910</sup> **CW-3**, Sampath Statement I ¶ 124.

<sup>911</sup> C-290, Letter from K. Sampath, HMDC to Jeff Bugden, CNLOPB attaching

Expenditure Application Form (Mar. 10, 2014), p. 4 (p. MOB0005416).

<sup>912</sup> *Ibid*, p. 8 (p. MOB0005420).

<sup>913</sup> *Ibid*, p. 4 (p. MOB0005416).

<sup>914</sup> *Ibid*, p. 1 (p. MOB0005413).

<sup>915</sup> *Ibid*, slide 1 (p. MOB0005424).

<sup>916</sup> **R-215**, Letter of Agreement between HMDC and C-Core for (Jul. 9, 2014), p. MICI 0004312.

weather conditions be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported."<sup>917</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

#### C. Mobil's Response And Further Witness Testimony

The Mobil I Majority found that CARD, the recipient institution of the expenditures for the project, "entails incremental expenditure." It further observed:

CARD functions as an autonomous research facility, which, as the Claimants point out, is accessible to all and can be used by their competitors. The Majority finds particularly convincing the Claimants' observation that this type of sharing arrangement is not representative of the manner in which Projects normally carry out "ordinary course" R&D spending. The finding that this expenditure is incremental is also supported by the timing of its inception (which was in 2010), which is clearly in line with the time period when the Claimants began to comply with the Guidelines in earnest.<sup>919</sup>

Given that CARD itself would not have been founded but for the Guidelines, the expenditures for CARD's project would likewise have not been incurred in the ordinary course of business. Mr. Sampath's further observations in his second witness statement, copied below, reinforce this conclusion.

#### CW-10, Sampath Statement II ¶¶ 132-133

Contrary to Canada's suggestion<sup>920</sup> and for the reasons that I give at paragraphs 32 through 38 of this statement, the fact that had some connection to this study does not mean that it would have been funded in the

<sup>919</sup> *Id.* ¶ 120.

<sup>920</sup> *Id.* at A-82.

<sup>&</sup>lt;sup>917</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>&</sup>lt;sup>918</sup> C-2, Mobil I Award ¶ 119.

ordinary course of business. Hibernia facilities are located far offshore, not in near-coastal regions. Thus, this research has no relevance to the Hibernia project.<sup>921</sup>

Canada takes quotes from the C-CORE proposal for this research study where they
state that . <sup>922</sup> This is another
instance where an external provider, C-CORE, has confused
, as I explain at paragraphs 43 through 44 of this study. In fact, the
results of this study
Not only that, because the provincial Research and

Development Corporation ("RDC") is providing the bulk of funding for this research,<sup>924</sup> I expect that the results will be available to the public at large.

- See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that URC may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")
- See also **CW-10**, Sampath Statement II ¶ 43-44 (explaining that some persons interfacing with mistook HMDC for a mere extension of ExxonMobil)

 $<sup>^{921}</sup>$  CW-3, Sampath Statement I ¶ 124.

<sup>&</sup>lt;sup>922</sup> Canada's Counter Memorial Appendix A, at A-82 to A-83.

<sup>&</sup>lt;sup>923</sup> See paragraphs 27 through 31, above.

<sup>&</sup>lt;sup>924</sup> **CW-3**, Sampath Statement I ¶ 123.

#### 57.Shad Valley Program (\$2,850,000)

#### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 94-96

The Shad Valley Program is a summer enrichment program held at twelve Canadian universities, including MUN, to encourage top-performing high school students to pursue studies in science, technology, engineering and mathematics.<sup>925</sup> Participating students are placed at universities in provinces different than their own where they attend lectures, seminars and workshops, and presentations by industry leaders.<sup>926</sup>

In 2013, HMDC donated \$2.85 million to MUN's Shad Valley Fund.<sup>927</sup> This amount consisted of to support the cost of Newfoundland and Labrador students attending Shad Valley programs at participating universities in other provinces, and an additional to support a Shad Valley Program coordinator at MUN.

Prior to implementation of the Guidelines, HMDC had never made a contribution to the Shad Valley Program. What explains HMDC's \$2.85 million contribution in 2013 was the Hibernia project's need to meet the Guidelines' in-province spending requirements.

#### **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges that this expenditure is compensable because it is a "community contribution" that was only undertaken as a result of the 2004 Guidelines, and prior to the Guidelines, HMDC had never made a contribution to

<sup>926</sup> Id.

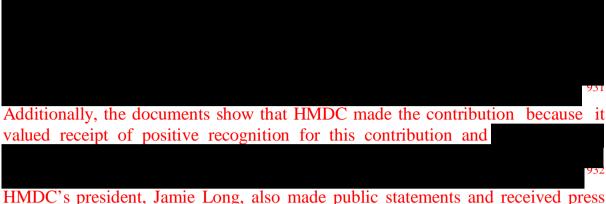
<sup>&</sup>lt;sup>925</sup> **C-271**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (November 12, 2013), *attaching* Shad Valley Project R&D Work Expenditure Application Form.

<sup>&</sup>lt;sup>927</sup> **C-212**, Hibernia 2013 Board R&D Decisions, Appendix B.

<sup>&</sup>lt;sup>928</sup> C-271, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (November 12, 2013), *attaching* Shad Valley Project R&D Work Expenditure Application Form.

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the Shad Valley Program.<sup>929</sup> Mr. Sampath, however, acknowledges that expanding the local labor pool through these HMDC- supported programs would be a benefit to all potential employers in the area, including Hibernia.<sup>930</sup> The documents indicate that the project's goals are to



coverage stating that "Hibernia is a strong supporter of science, technology, engineering and math educational initiatives." <sup>933</sup> The press release identifies ExxonMobil as an investor in HMDC. Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full amount of this expenditure.

#### C. Mobil's Response And Further Witness Testimony

<sup>930</sup> **CW-3**, Sampath Statement I ¶ 82.

<sup>931</sup> C-271, Letter from K. Sampath, HMDC to Jeff Bugden, CNLOPB attaching Shad Valley Project R&D/E&T Work Expenditure Application Form (Nov. 12, 2013), p. MOB0005069.

<sup>932</sup> **R-216**, Letter of Agreement between HMDC and MUN for the The Hibernia Project SHAD Valley Fund (Dec. 17, 2013), p. MICI 0004316.

<sup>933</sup> R-217, Hibernia News Release "Hibernia Investment Grows Enrichment Programming at Memorial University" (Jul. 24, 2014). Available at: <u>http://www.hibernia.ca/news/2014/shad.pdf</u>; R-218, CBC News Article, "Shad Valley fund open to 250 of province's top high school students" (Oct. 6, 2014). Available at: <u>http://www.cbc.ca/news/canada/newfoundland-labrador/shad-valley-fund-open-to-250-of-province-s-top-high-school-students-1.2788848</u>; R-219, Memorial University News Article, "Hibernia investment grows enrichment programming" (Jul. 28, 2014). Available at: <u>http://www.mun.ca/publicengagement/news.php?id=3797</u>.

<sup>&</sup>lt;sup>929</sup> CW-3, Sampath Statement I ¶ 96.

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have provided a community contribution of \$2.85 million to the Shad Valley Program. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>934</sup>

Before the enforcement of the Guidelines, HMDC did not make community contributions of this magnitude, and made no contributions to the Shad Valley Program. Indeed, in the Mobil I Arbitration, Canada did not even challenge the vast majority of the community contributions, which the Mobil I Majority awarded.<sup>935</sup> Mr. Sampath's additional testimony in his second witness statement only reinforces the conclusion that this \$2.85 million community contribution—in addition to the millions of dollars in other community contributions claimed in this proceeding—is incremental.

#### CW-10, Sampath Statement II ¶ 108-109

In relation to this contribution, Canada remarks that I "acknowledge[d]" in my first witness statement "that expanding the local labor pool through these HMDC-supported programs would be a benefit to all potential employers in the area, including Hibernia."<sup>936</sup> I do not see how this point supports Canada's position that this expenditure was made in the ordinary course of business, as it is not in HMDC's interest to bear the entirety of a contribution that benefits all potential employers. As I also noted in my first witness statement, which part Canada does not quote, "[t]o extent HMDC might wish to expand the local pool of potential employees, it can do so in ways that more directly benefit the [Hibernia] project."<sup>937</sup>

Canada also appears to suggest that the value of the "positive recognition" for this contribution justified HMDC's contribution to the Shad Valley Program.<sup>938</sup> In actual fact, any positive recognition gained by HMDC would be slight in

<sup>&</sup>lt;sup>934</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>935</sup> C-2, Mobil I Award ¶ 128-129 & n.62 (noting that Canada accepted the compensability of claimed community contributions and awarding them as incremental expenditures).

<sup>&</sup>lt;sup>936</sup> Counter Memorial Appendix A, at A-84 (citing **CW-3**, Sampath Statement I ¶ 82).

<sup>&</sup>lt;sup>937</sup> **CW-3**, Sampath Statement I, at ¶ 82.

<sup>&</sup>lt;sup>938</sup> Counter Memorial Appendix A, at A-84.

comparison to the amount of the expenditure: \$2.85 million. For the reasons given at paragraphs 39 through 42 of this statement, HMDC would not make expenditures of this magnitude just for the good will it might generate.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

#### 58. Subsea Leak Detection (

)

# A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 46-47

Although pipelines and subsea systems are designed not to leak, leaks can occur, though rarely. There are two known technologies that could potentially be used to detect and to locate rare instances of leakage: If such technology was needed for our facilities, we would have purchased the best available commercial technology at that time and would not have developed it on our own.

Through a JIP organized by PRNL, HMDC contributed in 2013 to an initiative to investigate and to advance these leak detection technologies.<sup>939</sup> In 2015, HMDC spent for subject matter expert support for the project.<sup>940</sup> But for the implementation of the Guidelines, HMDC would not have spent this amount.

• See also CW-7, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements")

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to R&D that would be used

The Claimant alleges

<sup>&</sup>lt;sup>939</sup> C-247, Letter from **Construction**, HMDC, to J. Bugden, CNLOPB, *attaching* Testing of Fiber Optic Cable Distributed Sensing Leak Detection System for Arctic and Cold Region Applications – Phase 1 R&D Work Expenditure Application Form (September 4, 2013); C-212, Hibernia 2013 Board R&D Decisions, Appendix A.

<sup>&</sup>lt;sup>940</sup> **C-216**, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A (reflecting for "SME support for Pipeline Leak Detection").

<sup>&</sup>lt;sup>941</sup> C-247, Letter from **Construction**, HMDC to Jeff Bugden, CNLOPB attaching Testing of Fiber Optic Cable Distributed Sensing Leak Detection System for Arctic and Cold Region Applications – Phase 1 (HMDC 13-10) R&D/E&T Work Expenditure Application (Sep. 4, 2013), p. 1. (p. MOB0004845).

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that this expenditure is compensable because such technology was not needed for Hibernia, and even if it was, they would have purchased the best available commercial technology at that time and not developed it on their own.<sup>942</sup> The documents, however, indicate that The documents further indicate that the project's objectives are to determine if Additionally, the incentives of the project are listed as:

The project is thus of benefit to both Hibernia and the Claimant's other projects in the offshore area. Canadian taxpayers should not have to compensate the Claimant for this value- added R&D. The Claimant also has a long-standing commitment in the Hibernia 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"<sup>946</sup> and to undertake and support "research to develop effective countermeasures...to minimize oil spills from ALPs and subsea components due to iceberg impact."<sup>947</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

<sup>944</sup> **R-155**, EMC R&D Screening Committee Presentation (Mar. 4, 2013), slide 9 (p. MICI 0004730).

<sup>945</sup> *Ibid*.

<sup>946</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>947</sup> **C-37**, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

<sup>&</sup>lt;sup>942</sup> **CW-3**, Sampath Statement I  $\P$  46.

<sup>&</sup>lt;sup>943</sup> C-247, Letter from **Construction**, HMDC to Jeff Bugden, CNLOPB attaching Testing of Fiber Optic Cable Distributed Sensing Leak Detection System for Arctic and Cold Region Applications – Phase 1 (HMDC 13-10) R&D/E&T Work Expenditure Application (Sep. 4, 2013), p. 1 (p. MOB0004845).

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have contributed to this PRNL R&D project. In addition, PRNL's involvement in organizing this JIP further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>948</sup>

This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>949</sup> As Mr. Sampath states in his first statement. Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

### CW-10, Sampath Statement II ¶ 68

This project to investigate leak detection technologies was conceived through a PRNL workshop program to help industry find Guidelines-eligible projects to fund.<sup>950</sup> The industry's interest in this project was low. It started out as a JIP organized through PRNL, with Phase 1 investigating what technologies were available in the industry and coming up with a cost estimate for Phase 2. By the time Phase 2 was ready to move forward, other operators backed out;

. HMDC's interest was likewise low, but it committed to fund Phase 2 anyway because the Hibernia project needed to spend additional money to meet unsatisfied spending obligations under the Guidelines.

<sup>&</sup>lt;sup>948</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>&</sup>lt;sup>949</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>950</sup> C-247, Letter from **Construction**, HMDC, to J. Bugden, CNLOPB, *attaching* Testing of Fiber Optic Cable Distributed Sensing Leak Detection System for Arctic and Cold Region Applications – Phase 1 R&D Work Expenditure Application Form (September 4, 2013).

59. Subsea Sentry System (

)

# A. First Witness Statement(s)

CW-3, Sampath Statement I ¶¶ 51 -53

is an ExxonMobil affiliate that engages in research and development of technology for exploration, development, production and gas commercialization. Beginning in or around 2012, collaborated with to initiate a multi-phased project to develop the SubSea Sentry System ("SSSS"). <sup>51</sup> This system would

directly financed the first two phases of the SSSS project. To secure funding for a third phase, partnered with a company called , which is based in Newfoundland and Labrador, that develops and manufactures underwater imaging systems.<sup>953</sup> The purpose of this phase was to verify that an SSSS prototype could

HMDC funded this third phase in 2014 in the amount of in 2015.<sup>955</sup> Additionally, HMDC incurred costs of <sup>57</sup> in 2014 and 2015, respectively, for a subject matter expert to support this work. Normally, HMDC would not step midstream into a partially completed R&D project conceived by others in order to advance it to completion. Also, while

<sup>952</sup> Id.

<sup>953</sup> *Id.* at p. 4.

<sup>954</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

 $^{955}$  C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

<sup>956</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

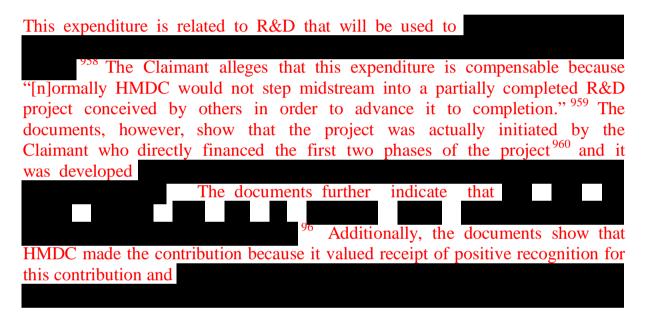
 $^{957}$  C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

<sup>&</sup>lt;sup>951</sup> **C-249**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (November 12, 2013), *attaching* Sub-sea [Se]ntry System R&D Work Expenditure Application Form, at p. 23.

the SSSS could theoretically be deployed at Hibernia, there were no such plans, and I am not aware of any analysis to show whether it makes financial or operational sense to do so.

• See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

### **B.** Appendix A to Canada's Counter Memorial



<sup>961</sup> **R-220**, Presentation, Procurement and Integration (2013), slide 3 (p. MICI 0004371).

<sup>962</sup> **R-220**, Presentation, Procurement and Integration (2013), slide 6 (p. MICI 0004374). See also **C-249**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching Sub- Surface Sentry System R&D Work Expenditure Application Form (Nov. 12, 2013), p. 7 (p. MOB0004865).

<sup>&</sup>lt;sup>958</sup> **CW-3**, Sampath Statement I ¶ 52; **C-249**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching Sub-Surface Sentry System R&D Work Expenditure Application Form (Nov. 12, 2013, p. 5 (p. MOB0004863).

<sup>&</sup>lt;sup>959</sup> **CW-3**, Sampath Statement I ¶ 53.

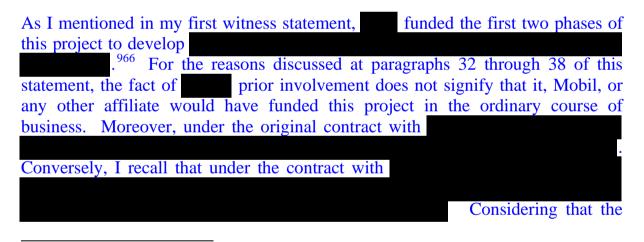
<sup>&</sup>lt;sup>960</sup> **CW-3**, Sampath Statement I ¶ 52.

<sup>"963</sup> Canadian taxpayers should not have to compensate the Claimant for this value- added R&D. The Claimant has a longstanding commitment in the Hibernia 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."<sup>964</sup> TheClaimanthas failedtoprovewithreasonablecertaintythatthisexpenditureis compensable.

### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have contributed to this R&D project. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>965</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

#### CW-10, Sampath Statement II ¶¶ 70-72



<sup>963</sup> **R-221**, Letter of Agreement between HMDC and **R-222**, Letter of Agreement between HMDC and Internet of Agreement between HMDC and Internet. for Subsea Sentry System Project (Feb. 27, 2014), p. 2 (p. MICI 0004403).

<sup>964</sup> **C-37**, Hibernia Decision 86.01, p. 25.

<sup>965</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>966</sup> **CW-3**, Sampath Statement I ¶ 52.

equipment is likely to cost would not have justified the expenditure.

Additionally, I note that while the leak detection system under development is intended for . For this additional reason, HMDC would definitely not have funded this project in the ordinary course of business.<sup>967</sup>

Canada notes that the contribution agreement

.<sup>968</sup> As discussed at paragraphs 39 through 42 of this statement, this does not show that HMDC would have funded this research in the ordinary course of business.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

<sup>&</sup>lt;sup>967</sup> See also paragraphs 27 through 31, above.

<sup>&</sup>lt;sup>968</sup> Counter Memorial Appendix A, at A-87.

#### 60. Synthetic Aperture Radar (

#### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 65-66

has a synthetic aperture radar system called that measures sea ice thickness. In 2015, HMDC paid to to fly sorties to test the system, and an additional was spent by HMDC on subject matter support in 2014 and 2015.<sup>969</sup> The end purpose of the tests was to determine whether the was capable of reliably measuring ice thickness.<sup>970</sup>

But for the Guidelines, HMDC would not have funded the tests of the system. HMDC does not pay contractors like to test out their proprietary technology so they can use the results to market their capabilities.

### **B.** Appendix A to Canada's Counter Memorial

This R&D expenditure relates to tests that were conducted in order to determine the reliability for measuring sea ice thickness. The Claimant alleges that this expenditure is compensable because HMDC does not pay contractors to test out their proprietary technology so they can use the results to market their capabilities.<sup>971</sup> The documents, however, state that there is value added for "[i]ceberg detection in strategic zones and in

<sup>972</sup> The

<sup>969</sup> C-192, Hibernia 2014 Board R&D Decisions, Appendix A (reflecting for "SME support for Multiband SAR project"; C-251, Hibernia January-April 2015 Board R&D Decisions, Appendix A; C-245, HMDC, Corrections to R&D and E&T Expenditures in 2014 and January-April, 2015, Appendix A; C-216, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

<sup>970</sup> **C-256**, Service Agreement or Enabling Agreement between and HMDC, dated August 25, 2014, p. 4.

 $^{971}$  **CW-3**, Sampath Statement I ¶ 66.

<sup>972</sup> **C-234**, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), slide 8 (p. MOB0004523).



reduction of operational downtime and the promotion of the safety of assets can be used to enhance the work that HMDC is already doing in the area in the ordinary course. Iceberg detection radar is of critical importance and use to Hibernia and future arctic offshore operations. Canadian taxpayers should not have to compensate the Claimant for this value-added R&D. The Claimant has a longstanding commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported."<sup>975</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have incurred over **business** for development of a potential technology that it did not need. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>976</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

<sup>&</sup>lt;sup>973</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. ii (p. MICI 0002723).

<sup>&</sup>lt;sup>974</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. 2 (p. MICI 0002733).

<sup>&</sup>lt;sup>975</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>&</sup>lt;sup>976</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

# CW-10, Sampath Statement II ¶¶ 81-84

This project involved paying a contractor, **and the second second**, to test its proprietary radar system so that it could use the results to market its capabilities. As I stated in my first witness statement, this is not the type of arrangement that HMDC (or an ExxonMobil affiliate, for that matter) would accept in the ordinary course of business, particularly an expenditure like this exceeding

Originally, it was anticipated that this project would be conducted as a JIP among multiple operators, including possibly and and



Canada contends in relation to this R&D project that "[i]ceberg detection radar is of critical importance and use to Hibernia and future arctic offshore operations."<sup>978</sup> I take at least two exceptions to this statement. First, it appears to be premised on excerpts of certain C-CORE documents that Canada has quoted in Appendix A, which discuss the importance of iceberg protection systems.<sup>979</sup> But this project involves using and the measure sea ice thickness and does not concern icebergs.

Second, neither the possibility of sea ice nor icebergs impacting Hibernia operations was the motivation for this study. The GBS platform is naturally protected from large icebergs by the shallow banks surrounding it, and icebergs small enough to impact the GBS platform do not pose a safety concern. Also, sea ice is rare in the area where the Hibernia project's facilities are located, undercutting any possible commercial rationale for funding this project.<sup>980</sup>

• See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but

<sup>979</sup> *Id.* at A-88 to A-89 (citing C-234, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), and R-122, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010)).

<sup>980</sup> See also paragraphs 22 through 26 of this statement.

<sup>&</sup>lt;sup>977</sup> **CW-3**, Sampath Statement I  $\P$  66.

<sup>&</sup>lt;sup>978</sup> Counter Memorial Appendix A, at A-89.

that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

# 61.

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶¶ 60-61

As	part	of	its	compre	hensive	worker	wellness	system,	HMDC	provides
to workers housed on the Hibernia platform. In 2014, HMDC made a										
func	ling	cont	ribut	tion to	1	to condu	<u>ct</u> a stud	ly to bett	er under	stand the
effe	ctiver	ness	of				and	identify	any imp	rovement
					contrib	outed	to	this study	in 2014	4 and an
addi	tiona	1		in 2015	5. <sup>982</sup>					

HMDC is certainly concerned with of its offshore workers, as evidenced by the fact that it provides in the first place. That said, study into the usage and efficacy of the is not something that HMDC would fund in the ordinary course of business.

### **B.** Appendix A to Canada's Counter Memorial

This R&D expenditure is related to a project which investigates the \_\_\_\_\_\_. The Claimant alleges this expenditure is compensable because although HMDC provides \_\_\_\_\_\_\_\_ to workers housed on the Hibernia platform, a study by the service "into the useage and efficacy of the \_\_\_\_\_\_\_\_ is not something that HMDC would fund in the ordinary course of business." <sup>983</sup> The documents, however, state that the research will

<sup>981</sup> C-254, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB (February 27, 2014), *attaching* R&D Work Expenditure Application
 Form.

<sup>982</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A; **C-216**, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

 $^{983}$  **CW-3**, Sampath Statement I ¶ 61.

<sup>984</sup> HMDC is already providing these services to offshore workers so it must view the services as worthwhile, and this expenditure merely seeks to evaluate the services in the interest of productivity efficiency. Canadian taxpayers should not have to compensate the Claimant for enhancing the . The Claimant has failed to prove with reasonable

certainty that it should be compensated for the full amount of this expenditure.

# C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have paid any amount for this research project. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>985</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

#### CW-10, Sampath Statement II ¶ 79

This expenditure was made for HMDC's **construction** to assess the effectiveness of its **construction** for the workers of the Hibernia platform.<sup>986</sup> Canada notes that "HMDC is already providing these services to offshore workers so it must view the services as worthwhile, and this expenditure merely seeks to evaluate the services in the interests of productivity efficiency."<sup>987</sup> I stated as much in my first witness statement.<sup>988</sup> But I understand the issue to be whether HMDC would have funded this evaluation study in the absence of the Guidelines. To that question, my answer remains 'no.' On this point, I consider it relevant that

<sup>984</sup> C-254, Letter from K. Sampath, HMDC to Colin Dyer, CNLOPB attaching

R&D/E&T Work Expenditure Application Form (Feb. 27,

2014), p. 2 (p. MOB0004933).

<sup>&</sup>lt;sup>985</sup> C-2, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>986</sup> **CW-3**, Sampath Statement I ¶ 60.

<sup>&</sup>lt;sup>987</sup> Counter Memorial Appendix A, at A-89 to A-90.

<sup>&</sup>lt;sup>988</sup> **CW-3**, Sampath Statement I ¶ 61.

an evaluation of the **boundary** had not been performed at Hibernia prior to the implementation of the Guidelines.

### 62. Towing Icebergs (

# A. First Witness Statement(s)

# CW-3, Sampath Statement I ¶¶ 57-58

HMDC, along with Husky Oil Operations Limited as operator of the White Rose Project, funded this JIP to assess the practical and technical feasibility of towing icebergs through sea ice.<sup>989</sup> HMDC contributed to this project in 2013,<sup>990</sup> and an additional in 2014.<sup>991</sup>

)

For some offshore facilities located in arctic environments, the capability to deflect approaching icebergs by way of towing can form part of a comprehensive ice management strategy. That said, the Hibernia Gravity Base Structure ("GBS") was designed and built to withstand the potential impacts of large icebergs. If research into towing methods was needed to protect the GBS against iceberg impacts, then such research would have been performed long before the GBS was installed and commenced operations.

• See also **CW-7**, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements")

# **B.** Appendix A to Canada's Counter Memorial

This expenditure relates to R&D that was conducted in order to improve iceberg towing capabilities in harsh environments. The Claimant alleges that this expenditure is compensable because HMDC will not have much (if any) need for any of the resulting technologies, and Terra Nova's less-developed icemanagement program is also "suitable".<sup>992</sup> However, the documents confirm that the research is relevant to other projects,

 $<sup>^{989}</sup>$  C-236, PRNL, Contribution Agreement regarding the Project "Towing Icebergs in Sea Ice – Project C - Phase 1" dated April 5, 2013.

<sup>&</sup>lt;sup>990</sup> **C-237**, PRNL, Invoice to HMDC (number 20130504) dated May 14, 2013.

<sup>&</sup>lt;sup>991</sup> **C-238**, PRNL, Invoice to HMDC (number 20140802) dated September 15, 2014.

<sup>&</sup>lt;sup>992</sup> **CW-5**, Noseworthy Statement I  $\P$  27.

It is necessary because
The documents further state that
The documents confirm that the objective of the project is
<sup>998</sup> Canadian taxpayers should not be

required to compensate the Claimant for this value-added R&D. The Claimant has a long- standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported."<sup>999</sup> The

<sup>994</sup> **C-236**, PRNL, Contribution Agreement for "Ice Loads on Floating Structures – Phase 1" (Nov. 9, 2012), p. 19.

<sup>995</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. i (p. MICI 0002722).

<sup>996</sup> **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. ii (p. MICI 0002723). See also **R-129**, Presentation, Development of Improved Ice Management Capabilities for Operations in Ice Environments (Dec. 15, 2010), slide 13 (p. MICI 0003135).

<sup>997</sup> **R-125**, Letter from **Management**, HMDC to Jeff Bugden, CNLOPB attaching Ice Management Program R&D Work Expenditure Application Form (Dec. 15, 2010), slide 13 (p. MICI0003006). See also **R-129**, Presentation, Development of Improved Ice Management Capabilities for Operations in Ice Environments (Dec. 15, 2010), slide 13 (p. MICI 0003135).

<sup>998</sup> **R-125**, Letter from **Management**, HMDC to Jeff Bugden, CNLOPB attaching Ice Management Program R&D Work Expenditure Application Form (Dec. 15, 2010), slide 13 (p. MICI0003006).

<sup>999</sup> **C-37**, Hibernia Decision 86.01, p. 82.

<sup>&</sup>lt;sup>993</sup> **C-234**, C-CORE, Development of Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), p. 12.

Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

### C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>1000</sup>

In addition, PRNL's involvement in organizing this JIP further supports the incremental nature of this expenditure. As Mr. Durdle observes: "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>1001</sup>

Mr. Sampath's further observations about this expenditure, copied below, reinforce the conclusion that the Hibernia and Terra Nova operators would not have funded this JIP in the ordinary course of business.

#### CW-10, Sampath Statement II ¶¶ 57-58

This JIP to assess the feasibility of towing icebergs through sea ice has no application to the Hibernia project, given the GBS facility's location on shallow banks, which impede large icebergs, and its ability to withstand the impact of the relatively smaller icebergs found in its vicinity.<sup>1002</sup> Rather, this research came out of the 2009 or 2010 Ice Management workshop conducted through C-CORE in furtherance of the local industry's need for viable R&D projects on which to spend money in compliance with their expenditure obligations under the Guidelines. In

<sup>1002</sup> **CW-3**, Sampath Statement I  $\P$  37.

<sup>&</sup>lt;sup>1000</sup> **C-2**, Mobil I Award ¶ 67.

<sup>&</sup>lt;sup>1001</sup> **CW-7**, Durdle Statement I ¶ 17.

fact, the C-CORE presentation referenced by Canada appears to be related to this initiative.<sup>1003</sup>

Contrary to Canada's suggestion, the potential for improved iceberg towing techniques to be used at other projects would not have justified HMDC's expenditure on this JIP, for the reasons discussed at paragraphs 22 to 26 of this statement. Moreover, I am not aware of any current or future project where enhanced iceberg towing capabilities are

helpful or needed.

• See also **CW-10**, Sampath Statement II ¶¶ 22-26 (explaining that "as project operators, HMDC and Suncor would ordinarily fund R&D activities that have a direct and tangible impact on the projects under their operation" but that this and other incremental R&D expenditures "were unnecessary to the Hibernia and Terra Nova projects' operations and safety" and therefore they would not have been funded in the absence of the Guidelines)

<sup>&</sup>lt;sup>1003</sup> Counter Memorial Appendix A, at A-90 (citing **C-234**, C-CORE, Development of Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), p. 12).

# 63. Towing, Sheltering and Recovery of TEMPSC Lifeboats/Life Rafts

# A. First Witness Statement(s)

#### CW-7, Durdle Statement I ¶¶ 23-25

In an EER process, personnel are rescued to a place where safety and evacuation lifecraft are recovered. This typically involves transfers of personnel from Totally Enclosed Motor Propelled Survival Craft ("TEMPSC") or life rafts to fast rescue craft or support vessels. Such transfers can be complicated by Newfoundland's challenging offshore environment.

This JIP aimed to accomplish two things: *first*, to determine whether offshore evacuation safety risks can be reduced by developing and/or improving methods, processes and technologies associated with the towing, sheltering and wholesale recovery of TEMPSC lifeboats and life rafts; and *second*, to advance the state of knowledge of the operating performance capabilities and limitations of TEMPSC and life rafts under different environmental and rescue/recovery scenarios.<sup>1004</sup>

This JIP was not required by Hibernia's commercial or reasonable safety demands. It related to the ability to launch lifeboats in ice, as, whenever pack ice or sea ice encroaches on offshore facilities, it is no longer possible to do an emergency egress from that facility. However, with respect to the Hibernia GBS, no such egress or evacuation would occur if pack ice approached. Such events are infrequent. Pack ice has come close to the Hibernia GBS on occasion, but never, to my knowledge, in a way that would have impeded the launching of lifeboats. In any event, operations would likely continue or, in particularly severe cases, would be shut down and non-essential personnel evacuated. But, even in such an environment, we would not evacuate by way of an emergency egress—meaning that pack ice is irrelevant. As such, there was no pressing need for this project. Additionally, we have a formal ice management program that actively monitors pack ice and icebergs so encroachment of such would be known well ahead of time.

• See also CW-7, Durdle Statement I ¶ 17 (observing that "whenever PRNL is involved in organizing a given R&D project, it is a good indication that the

<sup>&</sup>lt;sup>1004</sup> **C-211**, Letter from **C-211**, HMDC, to J. Bugden, CNLOPB (Nov. 19, 2012), *attaching* R&D Work Expenditure Application related to Towing, Sheltering and Recovery of TEMPSC Lifeboats and Life Rafts.

project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements")

#### **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to R&D that was conducted with a goal of reducing offshore evacuation safety risks and advancing the state of knowledge of the operating performance capabilities and limitations of TEMPSC and life rafts under different environmental and rescue/recovery scenarios.<sup>1005</sup> The Claimant alleges that this expenditure is compensable because it has done very little to increase the immediate safety record at Hibernia.<sup>1006</sup> According to Mr. Durdle, this JIP was not required by Hibernia's commercial or reasonable safety demands because such events are "infrequent".<sup>1007</sup> However, the documents state that his research was undertaken because

relevant to the Hibernia project. Further, the documents indicate that there is



<sup>1005</sup> **CW-7**, Durdle Statement I  $\P$  24.

<sup>1006</sup> **CW-7**, Durdle Statement I  $\P$  16.

<sup>1007</sup> **CW-7**, Durdle Statement I  $\P$  25.

<sup>1008</sup> **R-223**, PRNL, Contribution Agreement for "Towing, Sheltering and Recovery of TEMPSC Lifeboats and Life Rafts" (Nov. 9, 2012), p. A-1 (p. MICI 0004462).

<sup>1009</sup> **R-98**, EMC R&D Screening Committee Presentation (Sep. 28, 2012), slide 9 (p. MICI 0004703); **R-223**, PRNL, Contribution Agreement for "Towing, Sheltering and Recovery of TEMPSC Lifeboats and Life Rafts" (Nov. 9, 2012), p. A-1 (p. MICI 0004462).

<sup>1010</sup> **R-223**, PRNL, Contribution Agreement for "Towing, Sheltering and Recovery of TEMPSC Lifeboats and Life Rafts" (Nov. 9, 2012), p. A-2 (p. MICI 0004463); **R-98**, EMC R&D Screening Committee Presentation (Sep. 28, 2012), slide 9 (p. MICI 0004703).

improving safety and reducing operational risks. Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant also has a long-standing commitment in the Hibernia 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." The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

In relation to another JIP, the Mobil I Majority recognized the fact that the expenditure was conducted jointly by multiple operators "supports the Claimants' assertion that the project was not specifically needed at Hibernia" given "that this type of joint approach is unusual and was a novel initiative that was a response to the Guidelines."<sup>1011</sup> In relation to still another JIP, the Mobil I Majority further recognized that not all safety-related expenditures would have been undertaken even in the absence of the Guidelines.<sup>1012</sup>

In addition, PRNL's involvement in organizing this JIP further supports the incremental nature of this expenditure. As Mr. Durdle observed in his first witness statement, "[W]henever PRNL is involved in organizing a given R&D project, it is a good indication that the project was undertaken outside of the ordinary course of business and for the purpose of satisfying the Guidelines' spending requirements."<sup>1013</sup> Mr. Durdle's further observations about this expenditure in his second witness statement, copied below, reinforce the conclusion that HMDC would not have funded this JIP in the ordinary course of business.

#### CW-12, Durdle Statement II ¶¶ 12 – 13

This JIP focused on improving the systems and knowledge surrounding TEMPSC lifeboats in challenging offshore environments in arctic regions.<sup>1014</sup> Canada references documents describing the JIP's aims, with the apparent intention of

<sup>1012</sup> *Id.* ¶ 76-78.

<sup>1013</sup> **CW-7**, Durdle Statement I ¶ 17.

<sup>1014</sup> **CW-7**, Durdle Statement I  $\P$  24.

<sup>&</sup>lt;sup>1011</sup> **C-2**, Mobil I Award ¶ 67.

implying that HMDC funded this project in order to improve the methods, processes, and technologies associated with TEMPSC lifeboats.<sup>1015</sup> But, as I already explained in my first witness statement, the TEMPSC lifeboats at Hibernia are very unlikely to ever be deployed in the pack ice conditions assumed by this JIP, given that non-essential personnel would be transferred away from the platform by conventional means before pack ice would present any risk to the platform or its personnel.<sup>1016</sup> Also, there was no indication that improved methods, processes, or technologies were needed in the event the TEMPSC lifeboats at Hibernia would ever be used. I therefore cannot agree that this JIP is "highly relevant to the Hibernia project," as Canada claims.<sup>1017</sup>

Canada also claims that this JIP is "beneficial . . . in improving safety and reducing operational risks." <sup>1018</sup> I do not know whether this JIP will one day lead to improved concepts concerning the handling of TEMPSC lifeboats. But a long lead time is required to bring a new concept into the field, and the Hibernia project has a limited field life. For this further reason, a business case could not be made for HMDC's expenditure of limited project account funds on an initiative that likely will never be deployed for the benefit of the Hibernia project.

<sup>1018</sup> *Id.* at A-93.

<sup>&</sup>lt;sup>1015</sup> Counter Memorial Appendix A, at A-92 to A-93 (citing **R-223**, PRNL, Contribution Agreement for "Towing, Sheltering and Recovery of TEMPSC Lifeboats and Life Rafts" (Nov. 9, 2012); **R-98**, EMC R&D Screening Committee Presentation (Sep. 28, 2012)).

<sup>&</sup>lt;sup>1016</sup> **CW-7**, Durdle Statement I  $\P$  25.

<sup>&</sup>lt;sup>1017</sup> Counter Memorial Appendix A, at A-92.

### 64. Wave Impact Study (

#### )

# A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 56-57

A significant consideration in the design of offshore and nearshore structures is the long-term effects that dynamic wave loads exert. To better understand these effects, proposed that Hibernia fund a study of pressure and force worked with a St. John'ssensor technologies that measure wave loads. based contractor called to conduct model testing, physical model design and constructing, and data processing in the Province.<sup>1019</sup> to fund the wave impact study and incurred In 2014, HMDC contributed in subject matter expert support.<sup>1020</sup> HMDC provided another another of funding in 2015, and it incurred in subject matter support.

In the absence of the Guidelines, HMDC would not have funded the wave impact study. The results of the study could be of benefit to new construction projects in the design phase, but not to completed structures like the Hibernia platform. The gravity base structure was designed according to safety factors that take account of wave impact, making the results of this study useless to Hibernia.

• See also **CW-3**, Sampath Statement I ¶¶ 21-25 (explaining that to meet the required expenditure levels set under the Guidelines, the Hibernia and Terra Nova operators funded "R&D activities between 2012 and 2015 that were not required for the safety or success of the projects themselves")

# **B.** Appendix A to Canada's Counter Memorial

This expenditure is related to R&D that was conducted in order to better understand the long- term effects that dynamic wave loads exert. <sup>1022</sup> The

<sup>1019</sup> C-252, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB (October 22, 2013), *attaching* Wave Impact Study R&D Work Expenditure Application Form.

<sup>1021</sup> **C-251**, Hibernia January-April 2015 Board R&D Decisions, Appendix A; **C-216**, Draft Hibernia May-December 2015 R&D and E&T Expenditures Report, Appendix A.

 $^{1022}$  CW-3, Sampath Statement I ¶ 56.

<sup>&</sup>lt;sup>1020</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix A.

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Claimant alleges that this expenditure is compensable because it is not of benefit to completed structures like the Hibernia platform.<sup>1023</sup> However, the Claimant's own witness admits that this expenditure and that it can benefit "new construction projects in the design phase".<sup>1024</sup> The documents also confirm that

							Further,		
		The	documents	also	observe	that			
							1028		
Documents also confirm that this research is necessary:									
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<sup>029</sup> Canadian taxpayers should

not be required to compensate the Claimant for this value-added R&D. The Claimant has, in any event, a long-standing commitment in the Hibernia 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." <sup>1030</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

<sup>1023</sup> **CW-3**, Sampath Statement I  $\P$  57.

<sup>1024</sup> CW-3, Sampath Statement I ¶¶ 56-57.

<sup>1025</sup> **C-252**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching Wave Impact Study R&D Work Expenditure Application Form (Oct. 22, 2013), p. 1 (p. MOB0004915).

<sup>1026</sup> *Ibid*, pp. 2-3 (pp. MOB0004916-7).

<sup>1027</sup> *Ibid*, p. 2 (p. MOB0004916).

<sup>1028</sup> *Ibid*, p. 3 (p. MOB0004917).

<sup>1029</sup> *Ibid*, p. 1 (p. MOB0004915).

<sup>1030</sup> **C-37**, Hibernia Decision 86.01, p. 25.

### C. Mobil's Response And Further Witness Testimony

Canada has not pointed to any evidence that might detract from the fact that in the ordinary course of business, HMDC would not have funded this study into the measurement of wave impacts. This is just another instance of Canada "questioning the statements of [Mobil's] witness, rather than offering tangible evidence to refute them."<sup>1031</sup> Mr. Sampath's additional testimony in his second witness statement, copied below, only reinforces the conclusion that this contribution by HMDC was an incremental expenditure.

#### CW-10, Sampath Statement II ¶ 74-75

As Canada observes, had limited involvement in conceptualizing and assisting in this R&D project to study the long-term effects of wave loads on offshore structures.<sup>1032</sup> Yet this does not signify that the maximum, Mobil, or any other affiliate would have funded this study in the ordinary course of business, as I explain in paragraphs 32 through 38 of this statement.

Canada additionally observes that the results of this research may be used to inform the design criteria of new construction projects.<sup>1033</sup> But this fact actually tends to show that this R&D project was not funded in the ordinary course of business, as the results would be available to any of the Hibernia project owners designing structures for future offshore projects. As I discuss at paragraphs 27 through 31 of this statement, if information is worth keeping proprietary, it would not be made available to ExxonMobil's competitor's in this way.

- See also **CW-10**, Sampath Statement II ¶¶ 32-38 (explaining why "the fact that may have been involved in a given R&D project does not mean that it would have been funded in the ordinary course of business")
- See also **CW-10**, Sampath Statement II ¶¶ 27-31 (explaining why in the ordinary course Mobil or its subsidiaries would not accept the arrangement for sharing intellectual property entailed by this R&D expenditure)

<sup>&</sup>lt;sup>1031</sup> **C-2**, Mobil I Award ¶ 77 (rejecting Canada's unsupported second-guessing).

<sup>&</sup>lt;sup>1032</sup> Counter Memorial Appendix A, at A-93.

<sup>&</sup>lt;sup>1033</sup> *Id*.

#### 65. Women in Science and Engineering Program (

#### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 150-151

Women in Science and Engineering Newfoundland and Labrador ("WISE NL") is a not-for-profit organization that endeavors to increase the participation of women in science, technology, engineering, and mathematics careers.<sup>1034</sup> HMDC made its first contribution in 2011, which I understand was claimed to be an incremental expenditure in the Mobil I arbitration.<sup>1035</sup> Canada did not contest this claim, and the tribunal majority ultimately awarded damages on it.<sup>1036</sup>

In 2013, 2014, and 2015, HMDC made contributions to WISE NL of each of those years to support the organization's summer program.<sup>1037</sup> As with the 2011 contribution to WISE NL, these later contributions would not have been made in the ordinary course of business but instead was driven by the Guidelines.

#### **B.** Appendix A to Canada's Counter Memorial

The Claimant alleges this "community contribution" is compensable because it does "not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated."<sup>1038</sup> In contradiction to this claim, the documents show that HMDC valued receipt of positive recognition for this contribution and

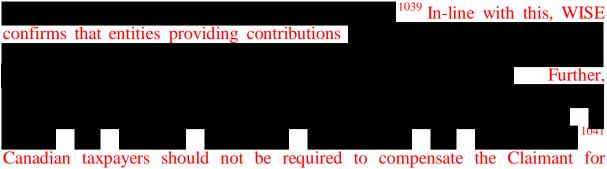
<sup>1036</sup> **C-2**, Mobil I Award ¶ 128.

<sup>1037</sup> C-212, Hibernia 2013 Board R&D Decisions, Appendix B; C-192, Hibernia 2014 Board R&D Decisions, Appendix B; C-251, Hibernia January-April 2015 Board R&D Decisions, Appendix B.

<sup>1038</sup> **CW-3**, Sampath Statement I ¶ 132.

<sup>&</sup>lt;sup>1034</sup> **C-312**, Hibernia Women in Science and Engineering Student Summer Employment Program R&D Work Expenditure Application Form (Nov. 7, 2011).

<sup>&</sup>lt;sup>1035</sup> **C-189**, Letter from J. Bugden, CNLOPB, to **1035**, HMDC (June 7, 2012), *attaching* 2011 R&D and E&T Expenditure Spreadsheets and Eligibility Determinations, Appendix B.



contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full amount of this expenditure

#### C. Mobil's Response And Further Witness Testimony

The incremental nature of HMDC's contribution to the WISE NL program is *res judicata* and cannot be questioned in this proceeding. In the Mobil I Arbitration, Canada accepted that Mobil "provided sufficient evidence" that this community contribution was incremental. <sup>1042</sup> The Mobil I Majority decided that this contribution was an incremental expenditure based on Canada's acceptance. <sup>1043</sup> Canada does not address its prior acceptance, much less does it dispute the Mobil I Majority's final disposition on the incremental nature of this expenditure.

<sup>&</sup>lt;sup>1039</sup> **R-224**, Letter Agreement between HMDC and WISE Newfoundland and Labrador for Women in Science and Engineering Student Summer Employment Program (Jun. 19, 2013), p. 2 (p. MICI 0004513).

<sup>&</sup>lt;sup>1040</sup> **C-312**, Letter from **Matter**, HMDC, to J. Bugden, CNLOPB, attaching Hibernia Women in Science and Engineering Student Summer Employment Program R&D Work Expenditure Application Form (Nov. 7, 2011), p. MOB0005687-5688.

<sup>&</sup>lt;sup>1041</sup> **R-224**, Letter Agreement between HMDC and WISE Newfoundland and Labrador for Women in Science and Engineering Student Summer Employment Program (Jun. 19, 2013), p. 1 (p. MICI 0004512).

<sup>&</sup>lt;sup>1042</sup> C-389, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Canada's Rejoinder on Damages (January 25, 2013, at ¶ 123 n.267. See also C-390, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Second Post-Hearing Report of Richard E. Walck (January 25, 2013), Annex I, at p. 7.

<sup>&</sup>lt;sup>1043</sup> **C-2**, Mobil I Award ¶¶ 128-129 & n. 162.

While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

••••

• Women in Science and Engineering Program;<sup>1044</sup>

••••

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>1045</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>1046</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>1047</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly

<sup>1045</sup> *Id.* ¶ 133.

<sup>1046</sup> *Id*.

<sup>&</sup>lt;sup>1044</sup> **CW-3**, Sampath Statement I ¶¶ 150-151.

 $<sup>^{1047}</sup>$  *Id.* ¶ 132. See also paragraphs 39 through 42, above.

given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

### 66.WRDC Contributions (\$261,750)

### A. First Witness Statement(s)

#### CW-3, Sampath Statement I ¶¶ 152-153

I understand the Claimants in the Mobil I arbitration claimed that their contributions to Women in Resource Development Corporation ("WRDC") constituted incremental expenditures. Canada ultimately did not contest this, and the Mobil I tribunal majority awarded damages in respect of the contributions.<sup>1048</sup> For background, WRDC is a not-for-profit organization based that seeks to increase the participation of women in the trades and technology sectors in Newfoundland and Labrador. As part of its mission, WRDC administers and delivers a program called Orientation to Trades and Technology ("OTT"), which is designed to give women practical experience of natural resource based industries.<sup>1049</sup>

In 2014, HMDC donated \$261,750 to the OTT program, of which \$95,000 was provided to fund scholarships for student summer jobs.<sup>1050</sup> HMDC did not make these contributions with the expectation that it would train women in the specific skills needed to support the Hibernia project or otherwise expand the pool of prospective female workers.

#### **B.** Appendix A to Canada's Counter Memorial

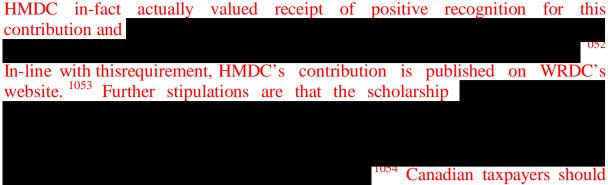
The Claimant alleges this "community contribution" is compensable because it does "not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated."<sup>1051</sup> In contradiction to this claim, the documents show that

<sup>1050</sup> **C-192**, Hibernia 2014 Board R&D Decisions, Appendix B; **C-245**, HMDC, Corrections to R&D and E&T Expenditures in 2014 and January-April, 2015, Appendix B.

<sup>1051</sup> **CW-3**, Sampath Statement I ¶ 132.

<sup>&</sup>lt;sup>1048</sup> **C-2**, Mobil I Award ¶ 128.

<sup>&</sup>lt;sup>1049</sup> **C-313**, Hibernia WRDC - Orientation to Trades and Technology Scholarships R&D Work Expenditure Application Form (Nov. 21, 2011).



not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full amount of this expenditure.

#### C. Mobil's Response And Further Witness Testimony

The incremental nature of HMDC's contribution to the WRDC program is *res judicata* and cannot be questioned in this proceeding. In the Mobil I Arbitration, Canada accepted that Mobil "provided sufficient evidence" that this community contribution was incremental.<sup>1055</sup> The Mobil I Majority decided that this contribution was an incremental expenditure based on Canada's acceptance.<sup>1056</sup>

<sup>1054</sup> **R-225**, Letter of Agreement between HMDC and Women in Resource Development Corporation for Education & Training Expenditure for Orientation to Trades and Technology Scholarships (Nov. 24, 2011), p. MICI 0004525-6.

<sup>1055</sup> C-389, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Canada's Rejoinder on Damages (January 25, 2013, at ¶ 123 n.267. See also C-390, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4), Second Post-Hearing Report of Richard E. Walck (January 25, 2013), Annex I, at p. 7.

<sup>1056</sup> **C-2**, Mobil I Award ¶¶ 128-129 & n. 162.

<sup>&</sup>lt;sup>1052</sup> **R-225**, Letter of Agreement between HMDC and Women in Resource Development Corporation for Education & Training Expenditure for Orientation to Trades and Technology Scholarships (Nov. 24, 2011), p. MICI 0004526.

<sup>&</sup>lt;sup>1053</sup> **R-226**, Women in Resource Development Corporation website excerpt, "About ERC" (2009). Available at: <u>http://wrdc.nf.ca/erc/index.htm.</u>

Canada does not address its prior acceptance, much less does it dispute the Mobil I Majority's final disposition on the incremental nature of this expenditure.

While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

• • • •

• WRDC Contributions;<sup>1057</sup>

• • • •

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>1058</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>1059</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>1060</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that

 $^{1058}$  Id. ¶ 133.

<sup>1059</sup> *Id*.

<sup>&</sup>lt;sup>1057</sup> **CW-3**, Sampath Statement ¶¶ 152-153.

 $<sup>^{1060}</sup>$  *Id.* ¶ 132. See also paragraphs 39 through 42, above.

were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

#### 67. Young Innovators Award (

)

# A. First Witness Statement(s)

### CW-3, Sampath Statement I ¶ 137

The Mobil I tribunal found that Suncor's contributions to the Young Innovators Award program were incremental expenditures when, in response to the Guidelines, these contributions were shifted to the Terra Nova project account and .<sup>1061</sup> Terra Nova's annual contributions of continued after the periods at issue in the Mobil I arbitration.<sup>1062</sup> As with prior contributions to the Young Innovators Award funded through the Terra Nova project joint account, these contributions would not have been made in the absence of the Guidelines.

# **B.** Appendix A to Canada's Counter Memorial

This expenditure concerns an award that recognizes, promotes and supports outstanding and innovative new faculty and researchers at Memorial University ("MUN").<sup>1063</sup>

Canada requested documents from the Claimant concerning this Suncor expenditure, but the Claimant failed to produce any relevant documents. The only evidence the Claimant proffers is that of its own witness, Mr. Sampath.<sup>1065</sup> Mr. Sampath, does

<sup>1061</sup> **C-2**, Mobil I Award ¶¶ 92-93.

<sup>1062</sup> **C-207**, Terra Nova 2012 Board R&D Decisions, Appendix B; **C-230**, Terra Nova 2013 Board R&D Decisions, Appendix B; **C-240**, Terra Nova 2014 Board R&D Decisions, Appendix B; **C-241**, Draft Terra Nova 2015 R&D and E&T Expenditures Report.

<sup>1063</sup> **R-36**, Terra Nova 2009 Benefits Report, p. 10.

<sup>1064</sup> **R-227**, Letter from **R**, CNLOPB to **R**, Petro-Canada attaching R&D Work Expenditure Form: Terra Nova Young Innovators Award (May 5, 2009), p. 2.

<sup>1065</sup> **CW-3**, Sampath Statement I ¶ 137.

not, however, file any documents from Suncor to support his testimony. The Claimant has a long-standing commitment in the Terra Nova Benefits Plan to "support education and training generally in the Province, beyond simply using local organizations and facilities to deliver the training needs of the [Terra Nova] Development".<sup>1066</sup> The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

# C. Mobil's Response And Further Witness Testimony

The incremental nature of the annual contributions to the Young Innovators Award program is *res judicata* and cannot be questioned in this proceeding. The Mobil I Majority held as follows:

The Majority finds that the Claimants have proven that this expenditure was incremental.

The Majority is persuaded that the Claimants did not contribute to the funding of this award until the Guidelines came into effect. This is significant and probative of a causal link to the Guidelines. Whilst the funding of this award was occurring pre- Guidelines, it was borne by a different entity and was of a lesser amount. This expenditure was not spending the Claimants themselves were undertaking until the Guidelines came into effect.<sup>1067</sup>

Canada does not address, much less dispute, the Mobil I Majority's final disposition on the incremental nature of the CARD annual contributions. While the doctrine of *res judicata* prevents the present Tribunal from reopening this holding, Mr. Sampath's responses to Canada's comments in his second witness statement, copied below, confirm the correctness of the Mobil I Majority's decision.

#### CW-10, Sampath Statement II ¶¶ 139-141

In my first witness statement, I explained that the Hibernia and Terra Nova operators would not have made contributions to support the following community organizations and programs:

<sup>&</sup>lt;sup>1066</sup> **C-41**, Terra Nova Decision 97.01, p. 23.

 $<sup>^{1067}</sup>$  C-2, Mobil I Award, ¶¶ 92-93 (footnotes omitted).

••••

• Young Innovators Award;<sup>1068</sup>

. . . .

At Hibernia in particular, the level of charitable contributions to community organizations and programs leapt dramatically after implementation of the Guidelines.<sup>1069</sup> The explanation for this increase was HMDC's need to make eligible E&T expenditures to spend down its obligations under the Guidelines.<sup>1070</sup>

The predominant argument raised by Canada in relation to these community contributions is that the operators sought to gain goodwill and positive recognition in exchange. But as I explained in my first witness statement, "[w]ithout the mandatory spending requirement, it would not make sense for a joint-interest project to make large charitable contributions through the project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." <sup>1071</sup> Furthermore, the total gross contributions to these community organizations and programs exceeded \$7 million over the period at issue in this arbitration, not inclusive of the millions more that were at issue in the prior NAFTA arbitration. These are extraordinarily high amounts for project operators to contribute toward charitable causes, particularly given that little if any of the positive recognition would be recouped by the projects' actual owners who are bearing the expenditures.

• See also **CW-10**, Sampath Statement II ¶ 39-42 (explaining why none of the incremental expenditures were undertaken in exchange for the potential recognition or publicity, including because "the value of any favorable publicity expected or gained by HMDC due to its financial contributions has been small in comparison to the amount of the expenditures in question")

 $^{1069}$  Id. ¶ 133.

<sup>1070</sup> Id.

<sup>&</sup>lt;sup>1068</sup> **CW-3**, Sampath Statement I ¶ 137.

<sup>&</sup>lt;sup>1071</sup> **CW-3**, Sampath Statement I ¶ 132. See also paragraphs 39 through 42, above.

# II.

#### **APPENDIX B**

With the Request for Arbitration of July 16, 2015, Claimant Mobil Investments Canada Inc. ("Mobil") submitted as Annex D a copy of the Certification of Resolutions Adopted by the Board of Directors of Mobil dated January 16, 2015 ("July 16, 2015 Certification"). This Certification accurately describes Mobil's ownership interests in the investments at issue in this arbitration (the "Investments"). In addition, by way of attachment to a letter from Mobil to the Secretary of the Tribunal sent on November 2, 2015, Mobil presented a copy of the Certification of Resolutions Adopted by the Board of Directors of Mobil dated October 30, 2015 ("October 30, 2015 Certification"). The October 30, 2015 Certification provides the same accurate description of Mobil's interests in the Investments as set forth in the July 16, 2015 Certification. Moreover, this description remains accurate as of the date of the filing of Claimant's Reply Memorial of September 23, 2016.

After Claimant's Memorial of March 11, 2016 ("Memorial") was filed, an erratum was discovered at paragraph 13 concerning Mobil's ownership interests in the Investments. Accordingly, paragraph 13 of the Memorial is amended as follows, so as to state the correct description of Mobil's ownership interests in the Investments that is reflected in the July 16, 2015 Certification and the October 30, 2015 Certification:

13. Mobil owns and controls all outstanding shares of ExxonMobil Canada Investments Company, a company organized under the laws of the Province of Nova Scotia, Canada. ExxonMobil Canada Investments Company in turn owns and controls all common outstanding shares of ExxonMobil Canada Ltd., a corporation organized under Canadian federal law, namely the Canada Business Corporations Act. ExxonMobil Canada Ltd. directly owns a 28.125% share in the primary production license for the Hibernia oil field and associated rights and interests, and it also directly owns a 19% share in the production licenses that comprise the Terra Nova oil field and associated rights and interests.