

**IN THE MATTER OF AN ARBITRATION UNDER CHAPTER ELEVEN OF THE
NORTH AMERICAN FREE TRADE AGREEMENT
AND THE UNCITRAL RULES OF 1976**

BETWEEN:

**WILLIAM RALPH CLAYTON, WILLIAM RICHARD CLAYTON, DOUGLAS CLAYTON,
DANIEL CLAYTON AND BILCON OF DELAWARE, INC.**

Claimants

AND

GOVERNMENT OF CANADA

Respondent

REJOINDER EXPERT REPORT OF LESLEY GRIFFITHS

November 6, 2017

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1.0 Introduction

1. My name is Lesley Griffiths. I have been asked by the Government of Canada to provide an opinion as to the conclusions the Whites Point joint review panel (“JRP”) could have reasonably reached with regard to its significance determination under the *Canadian Environmental Assessment Act* (“CEAA”), had it not committed the NAFTA breach in the Tribunal’s Award on Jurisdiction and Liability of March 17, 2017 (the “Award”).

2. In my analysis, I have been mindful of the Tribunal’s observation that the Whites Point JRP Report “expressly identifies only one effect of the project as both significant and adverse, namely ‘inconsistency with community core values.’”¹ Based on my review of the Whites Point JRP Report, I observe that the JRP clearly had other concerns about a number of adverse effects that could have been potential significant adverse environmental effects (“SAEE”) of the project. While the JRP did not expressly conclude that these other effects were likely SAEE under the CEAA, it also did not declare these effects were not significant.

3. Had the JRP been advised by the Government of Canada that determining effects on community core values was not an appropriate approach (the NAFTA breach), in my view, it is unlikely that the remaining sections of the report would have provided federal decision-makers with sufficient evidence that the project could proceed without resulting in adverse environmental outcomes. If federal decision-makers had instructed the JRP to reconvene to complete its mandate, it seems unlikely that the JRP would have provided additional findings and recommendations that supported project approval.

4. The purpose of this report is to respond to the Reply Expert Report of David Estrin.² In Part 2, I address Mr. Estrin’s assertion that the findings and conclusions of the Whites Point JRP should be largely determined by the content of government

¹ Award on Jurisdiction and Liability, 17 March 2015 (“Award”), ¶ 503.

² Expert Reply Report of David Estrin, 20 August 2017 (“Estrin Reply Report”).

submissions to the JRP. In my view, the JRP's federal mandate required the review panel to make independent determinations with respect to the likely SAEE of the project after mitigation. The Whites Point JRP's findings and recommendations were not required to be determined by the content of government's submissions. In Part 2, I also address Mr. Estrin's argument that the Whites Point project was "approvable" based on environmental assessment decisions made with regard to other projects he described as comparable. The determination of likely SAEE after mitigation is context specific and not based on the findings of other environmental assessments. Therefore, the outcomes of other environmental assessments are not an appropriate basis for predicting what the Whites Point JRP's findings and recommendations would have been, absent the NAFTA breach. In Part 3, I respond to his criticisms of my analysis of the likely project effects on whales and lobsters. In Part 4, I explain that the use of terms and conditions is only appropriate if they constitute adequate and effective mitigation.

5. Ultimately, Mr. Estrin's comments do not change my conclusion in my first report that the Whites Point JRP could have reasonably concluded that the project was likely to cause SAEE, after taking into account proposed mitigation measures, on the endangered North Atlantic right whale and on American lobster and lobster habitat, and that the JRP made other findings that did not support approval of the project.

2.0 Mr. Estrin's Assumption That There Would Be No Significant Adverse Environmental Effects Absent the NAFTA Breach Ignores the Whites Point JRP's Federal Mandate

2.1 Under the *CEAA*, Review Panels are Required to Determine the Significance of Environmental Effects of a Project

6. The central function of a federal review panel, as set out in s. 16(1)(b) of the *CEAA*, requires panels to determine the significance of the environmental effects of the project.³ As explained in my first report, the starting point for my analysis was

³ **RE-1**, Expert Report of Lesley Griffiths, 9 June 2017 ("Griffiths Report I"), ¶ 34.

the Whites Point JRP Report.⁴ I am aware of the Tribunal's observation at paragraph 503 of its Award that:

The Report expressly identifies only one effect of the project as both significant and adverse, namely "inconsistency with community core values". With respect to other impacts of the project, the Panel allowed that "with the effective application of appropriate mitigation measures, competent project management and appropriate regulatory oversight, most project effects should not be judged 'significant'".⁵

7. Mr. Estrin argues that "it is irrelevant for the Tribunal in this phase of the proceedings to now consider possible further reasons as to why the project might cause SAEE, and those parts of the reports provided by Canada to that effect are irrelevant".⁶ Mr. Estrin's assertion of irrelevancy is based on an interpretation that positions the JRP as having made just one finding of likely SAEE (i.e., community core values, "CCV" which was subsequently found by the Tribunal to be invalid) and as having definitively concluded that all other potential environmental effects of the project were not likely SAEE. However, this interpretation ignores the JRP's multiple, unresolved criticisms of many aspects of the project in favour of relying on twenty-seven words (a partial sentence) in the middle of the report that make a general observation.

8. The difficulty with Mr. Estrin's interpretation, and his accompanying dismissal of the relevancy of looking closer at the rest of the JRP's conclusions over and above CCV, is that there is extensive evidence in the JRP Report that the JRP was very concerned by the potential for other adverse environmental effects beyond CCV. In my view, this quotation from the JRP Report should be read in context. It occurred under the heading of 2.5 Adequacy Summary (as opposed to Section 4 of the report, which summarized the JRP's conclusions and recommendations) and is a

⁴ **RE-1**, Griffiths Report I, ¶ 59.

⁵ Award, ¶ 503.

⁶ Estrin Reply Report, ¶ 10.

preamble to the JRP's statement that "the accumulation of concerns about adequacy leads the Panel to question the Project."⁷

9. As described in my first report, the Whites Point JRP Report contained a number of loose ends, with the panel making findings of uncertainty with regard to a number of environmental effects but not reaching conclusions about what to do in the face of this uncertainty. For example, Table 2-1 summarizes the panel's concerns regarding the terrestrial, marine and human effects assessment.⁸ The table contains criticisms of the proponent's failure to provide adequate information about the project, or about the receiving environment. Further, it states that "[f]or some project effects the Proponent failed to demonstrate that it can implement technically or economically feasible mitigation measures" in nine project areas including "Visual monitoring for marine species at risk", "Compensation for opportunity loss in the fisheries", and "Preventing airborne particulate matter from fines".⁹ This table clearly indicates that the JRP was not convinced that there would in fact be "effective application of mitigation measures" in many cases.

10. It is also important to note that the JRP's statement refers to "most project effects". Clearly the JRP did not say "nearly all project effects" or "all project effects except one", leaving considerable room to conclude that the JRP did not necessarily believe that there were no potential SAEs other than CCV. Given the number of concerns about the other environmental effects of the project raised by the JRP in its report, in my view government decision-makers would have been ill-advised to base a project decision solely on a few words written by the JRP in the middle of the report that might appear to exonerate the Project from having any other SAEs, but only if taken out of context.

⁷ **R-212**, *Environmental Assessment of the Whites Point Quarry and Marine Terminal Project, Joint Review Panel Report* (Oct. 2007) ("JRP Report"), pp. 83-84.

⁸ **R-212**, JRP Report, p. 85.

⁹ **R-212**, JRP Report, p. 85.

11. It is unclear whether the Whites Point JRP would have determined that other individual project effects would have likely SAEE. Rather, what seems to have happened is that the JRP focused on the notion of “community core values” to the exclusion of other specific potential environmental effects. The fact that the JRP did not complete a proper “likely significant effects after mitigation” analysis on the project’s other environmental effects is acknowledged by the Tribunal at paragraph 535 of the Award:

[I]t appears certain to the Tribunal that the JRP was, regardless of its “community core values” approach, still required to conduct a proper “likely significant effects after mitigation” analysis on the rest of the project effects. By not doing so, the JRP, to the prejudice of the Investors, denied the ultimate decision makers in government information which they should have been provided.¹⁰

12. In these circumstances, a key question is, “what might the JRP have done if they had been informed that reliance on CCV was not a valid approach and then asked to revisit their conclusions?” I believe this is a relevant question because, under the *CEAA*, panels are respected advisory bodies that invest considerable time and effort in investigating the potential effects of a project with the assistance of many review participants. If one element of a panel report was determined to be outside the panel’s mandate, and if other analysis within the report appeared to be incomplete, it seems reasonable that the federal government decision-makers would ask the panel to clarify their conclusions and recommendations in light of this finding, rather than disregard all of the panel’s other findings. This is why I have used my experience as a panel chair to review both the evidence received by the JRP and their comments in their report, and have offered an interpretation of what a panel could reasonably have concluded with respect to SAEE findings.

13. Based on the foregoing, in my view, it is not “irrelevant” to consider the Whites Point JRP’s possible findings with respect to the other project effects (as Mr. Estrin suggests), because the panel did not complete this analysis, as it was required

¹⁰ Award, ¶ 535.

to do under the *CEAA*. While my analysis does not definitely conclude what the Whites Point JRP would have recommended under the *CEAA* had it not committed the NAFTA breach, and it is possible that the panel could have concluded that the project effects could be adequately mitigated, my analysis of JRP's findings and the public record does not support such a conclusion.

2.2 Government Submissions Do Not Determine a Review Panel's Findings

14. In his Reply Report, Mr. Estrin argues that my statement that it is not the job of government to make significance findings in a panel review is contradicted by my experience as a *CEAA* review panel chair for other projects, for which government opinions on the likely environmental effects of projects and their significance were both "invited and given full attention".¹¹ My statements were not intended to suggest that government departments do not provide their views on the likely effects of a project, or in some cases, on the significance of those effects, or that government submissions are not taken into account in the panel's recommendations to government decision-makers.

15. On the contrary, as stated in my first report, the review panel process is a public process, which offers an opportunity for public participation. This includes involvement by government officials, who routinely advise on the potential effects of a project within their department's expertise by providing their evidence and opinion on the likelihood of a project effect or what the effect would look like. The information from governments and other public participants sought by review panels is evidence based on research, monitoring, general knowledge and experience, to assist in the panel's evaluation of likely SAEE after mitigation.

16. The testimony provided by government officials is always an important component of the information upon which a panel will base its findings. However, in the context of a panel review, these submissions only form part of the information in

¹¹ Estrin Reply Report, ¶¶ 50-127.

the public record. Review panels receive information from a wide range of other sources, including the proponent, and other members of the public, such as holders of traditional or Indigenous knowledge, experts representing public interest groups, and other independent experts.

17. In conducting an environmental assessment, review panels are required to independently weigh and balance all of the information that is presented to them. In doing so, a review panel may choose to take the submissions of government officials into account in its findings and recommendations to the Minister. However, review panels are not required to defer to the positions taken or opinions expressed in submissions of government officials.

18. I agree that previous panels I have chaired have requested the input of government departments on whether the information submitted by the proponent “adequately identif[ied] impacts, risks and uncertainties of the Project, including the significance of the environmental effects.”¹² Anybody is entitled to present their views to the panel regarding the *significance* of environmental effects, in the sense of providing information or opinions about how important or detrimental or concerning an effect might be. The proponent also provides their own interpretation of the significance of effects. However, there is a distinction between asking for information on the significance of an effect and making a determination on what is a likely SAEE.

19. Mr. Estrin misrepresents the wording of these requests to suggest that review panels rely on government submissions to determine likely SAEE.¹³ However, I can confirm that this has not been the practice of any of the review panels in which I have been involved. In my experience, both the review panel and

¹² Estrin Reply Report, ¶ 80, citing **C-1404**, Lower Churchill Hydroelectric Generation Project Joint Review Panel, Letter to Mr. Charles Brown, Department of Natural Resources, 25 January 2011.

¹³ Estrin Reply Report, ¶¶ 62, 68-75.

government departments understand that it is the panel's role to evaluate the likely SAEE of a project after mitigation and not to defer to government submissions.

20. It should also be acknowledged that the word "significance" is routinely used in discourse around environmental assessment in its ordinary meaning. This is simply hard to avoid. A letter asking for views on the significance of an impact should not be conflated with requesting a conclusion on whether something is an SAEE. Therefore, if a government representative actually did come forward and declare that something is a likely SAEE – a very rare event – it would not necessarily determine the review panel's findings and recommendations. For example, in the environmental assessment of the Lower Churchill project, which I co-chaired, Environment Canada stated that it "expects there will not be any significant adverse effects on environmental matters within the Department's mandate."¹⁴ However, the panel nonetheless concluded that the residual adverse effect of the project on wetlands and riparian habitats, even with appropriate mitigation, was significant.¹⁵ Since government submissions do not determine a review panel's findings, I am of the view that Mr. Estrin's assertion that "none of the many federal and provincial officials who made submissions to the [Whites Point] JRP stated that the project was likely to cause any significant adverse environmental effects (SAEE) that could not be mitigated"¹⁶ does not support his argument that the Whites Point project would have been approved absent the NAFTA breach.

21. Ultimately, in the context of a review panel process, it is the panel that is tasked with determining whether there are any likely SAEE after mitigation. In doing so, it is the panel's job to establish the SAEE threshold for the project, something that government officials will likely not know when they make their

¹⁴ **R-772**, Environment Canada Review, "A Presentation to the Lower Churchill Hydroelectric Generation Project Joint Review Panel", 5 March 2011, p. 19.

¹⁵ **C-681**, Report of the Joint Review Panel, Lower Churchill Hydroelectric Generation Project, Nalcor Energy, Newfoundland and Labrador, August 2011, p. 100.

¹⁶ Expert of David Estrin, 8 March 2017, ¶ 4.

submissions.¹⁷ Whether or not government officials have taken a position on the significance of environmental effects does not alter the requirement for review panels to independently evaluate the project's effects under the *CEAA*. In making this determination, a review panel will consider all of the information submitted in the review panel process to evaluate the project's effects. Accordingly, government officials' position on the significance of environmental effects does not determine the outcome of a panel review.

2.3 The Determination of Significant Adverse Environmental Effects is Context Specific

22. Mr. Estrin has stated that "review panels are required to carry out an 'objective' assessment of the likely SAEE."¹⁸ He has also placed considerable reliance on the approval of other projects to suggest that the Whites Point project was "approvable."¹⁹ However, in practice, the SAEE assessment is context specific. As such, the proper approach to determining the outcome of the Whites Point project absent the NAFTA breach requires a consideration of the Whites Point JRP's potential findings and recommendations.

23. As explained in my first report, determination of significance needs to be impartial and unbiased but is also context specific and cannot be a purely mechanistic task.²⁰ A review panel process is very different from a comprehensive study in that review panels entail a much deeper level of investigation, and much wider public participation. To suggest that a review panel, that arrives at a different conclusion than that reached by a government department responsible for a shorter, simpler comprehensive study of a different project, is therefore not objective, is a strange and unsupported assertion.

¹⁷ **R-20**, *Reference Guide: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects*, Canadian Environmental Assessment Agency (Nov. 1994), ("CEAA Reference Guide"), p. 190.

¹⁸ Estrin Reply Report, ¶ 73.

¹⁹ Estrin Reply Report, ¶¶ 187-227.

²⁰ **RE-1**, Griffiths Report I, ¶ 39.

24. As a starting point, Mr. Estrin takes issue with the approach to my analysis, which is based on my experience as a review panel chair, because prior to the Whites Point project, no other quarry in Nova Scotia had been referred to a review panel assessment.²¹ Therefore, Mr. Estrin asserts that the relevant lens to use is that of a standard Nova Scotia environmental assessment review process. However, under the *CEAA*, the decision to refer a project to a review panel is at the discretion of the federal Minister of the Environment.²² Given that the Minister exercised his discretion to refer the Whites Point project to a review panel and that the Tribunal has not found any issues concerning the scope and level of assessment,²³ it is necessary to consider the Whites Point JRP's potential findings and recommendations, had it not committed the NAFTA breach. Thus, the approach to my analysis, from a review panel chair's perspective, is appropriate.

25. Taking a review panel's approach requires a consideration of the public record, not the outcome in some other, unrelated environmental assessment process. This is because determinations made by a review panel are required to be based on the information in the public record that is before it. In this regard, Mr. Estrin argues that review panels' assessments are objective.²⁴ In support of this statement, he relies on an excerpt of the Canadian Environmental Assessment Agency (the "Agency") reference guide, entitled: "Determining Whether A Project is Likely to Cause Significant Adverse Environmental Effects" (the "CEAA Reference Guide"), which states:

The central test in the Act is whether a project is likely to cause significant adverse environmental effects. This determination is an objective test from a legal standpoint, which means that all decisions about whether or not projects are likely to cause adverse environmental effects

²¹ Estrin Reply Report, p. 43, ¶¶ 172, 254-260.

²² **R-1**, *Canadian Environmental Assessment Act*, S.C. 1991, c. 37, s. 28(1) ("*CEAA*").

²³ Award, ¶ 490.

²⁴ Estrin Reply Report, ¶ 73.

must be supported by findings based on the requirements set out in the Act.²⁵

26. However, this statement relates only to the objective requirement that all decisions about whether a project is likely to cause adverse environmental effects must be supported by findings based on the requirements set out in the *CEAA*—hence, the importance of review panels making evidence-based findings with respect to project effects, as opposed to relying on a “standard practice” of approving every complete environmental assessment application.

27. Beyond the requirement that the determination of likely SAEE be supported by findings based on the requirements in the *CEAA*, the Act is not prescriptive with respect to application of the SAEE test. For example, neither the Act nor the Agency’s guidance documents tell a review panel what thresholds they must apply with respect to a significance determination. It is the job of the panel to decide on the thresholds for the particular project they are reviewing and its receiving environment.

28. As explained in my first report, the actual determination of likely SAEE after mitigation requires the evaluation of all of the factors under s. 16 of the *CEAA* in the appropriate context.²⁶ For example, with respect to the determination of whether an environmental effect is adverse, the *CEAA* Reference Guide notes that “the importance of individual characteristics will be different in different EAs.”²⁷ Similarly, with regards to determining whether adverse environmental effects are significant, the *CEAA* Reference Guide identifies five criteria that must be considered, but notes that “[d]ifferent criteria will be important in different EAs and the extent to which an individual criterion will influence the overall determination of significance will vary between assessments.”²⁸

²⁵ **R-20**, *CEAA Reference Guide*, p. 183 (emphasis added).

²⁶ **RE-1**, Griffiths Report I, ¶¶ 34-44.

²⁷ **R-20**, *CEAA Reference Guide*, p. 187.

²⁸ **R-20**, *CEAA Reference Guide*, p. 190.

29. With regards to environmental standards, guidelines or objectives that have been established by different levels of governments, the CEEA Reference Guide states that “[s]ince there are no standards, guidelines, or objectives for most environmental effects, they cannot be used to determine the significance of many adverse environmental effects, nor do they necessarily protect ecological health. In addition, standards, guidelines, or objectives are set on the basis of individual hazardous agents and do not allow for any interactions that may occur (i.e., cumulative environmental effects).”²⁹ The statements in the CEEA Reference Guide demonstrate that the determination of likely SAEE after mitigation is context specific.

30. Contrary to Mr. Estrin’s statements,³⁰ I have not “failed” to consider the findings with respect to similar environmental effects or the mitigation measures of other projects. In my experience, review panels do not base their determinations of likely SAEE after mitigation on the findings in the environmental assessments of other projects. Nor does Mr. Estrin provide any examples where a panel has based its findings or recommendations on the findings of other environmental assessments.

31. Such an approach would be inappropriate because the environmental effects of projects differ due to differences in size, operations, sensitivity of the surrounding environment and the socio-economic components and characteristics of local communities. The process of environmental assessment requires a detailed project description. No two quarry operations are exactly the same – for example, the geological resource, terrain, groundwater characteristics, and type and proximity of transportation options of projects may vary. Consequently, a receiving environment adjacent to the Bay of Fundy will have many differences from a receiving environment adjacent to the Atlantic Ocean. These differences matter when it comes to determining environmental effects.

²⁹ R-20, CEEA Reference Guide, p. 191.

³⁰ Estrin Reply Report, ¶¶ 225-227.

32. Each project must be assessed on its own merits. Therefore, past approvals do not necessitate or obligate a review panel to provide the same recommendation, especially when the approval is granted to a project in another ecological or environmental context. Otherwise there would be no point in having a panel review.

33. As observed in my first report, the Whites Point project was unique because it was situated in a highly sensitive area of great marine and avian biodiversity, and because of the presence of an endangered population of North American right whales, a thriving ecotourism sector, a regionally (and arguably provincially) important lobster fishery, shipping connections with an area hosting invasive species, an economy (particularly fishing and tourism) highly dependent on ecosystem health, its location on a narrow peninsula, and the high levels of public concern.³¹ The government recognized that the Whites Point project and its context was different from the other projects and referred it to a panel review. Therefore a different outcome from that of a different quarry project, in a different environment, undergoing a less rigorous level of environmental assessment, was not at all unreasonable.

34. I do not wish to suggest that what happens at other projects is potentially of no relevance for a panel review. If a witness brought forward information that another project had been approved with a specific set of terms and conditions, and provided further evidence that the project activity and effects had been adequately monitored, and that the results of that monitoring had shown that the environmental assessment predictions were or were not verified, and that mitigation measures had or had not proven to be effective, such information could be relevant to a review panel, with appropriate caution regarding differing contexts as described above. However, in my experience, this type of evidence is rarely available and it is not what Mr. Estrin is referring to.

³¹ **RE-1**, Griffiths Report I, Section 4.0.

35. Mr. Estrin is, instead, saying that a different type of environmental assessment process, one considerably less thorough than a panel review, for several different quarry projects in different locations, resulted in project approvals. Therefore, Mr. Estrin concludes that the Whites Point project was entitled to approval. However, Mr. Estrin does not refer to any evidence of how the other projects interacted with their receiving environments following their approval, and instead relies solely on the decisions that were made about a set of predictions.

36. In sum, my analysis, carried out from the perspective of a review panel member, is appropriate because the Minister exercised his discretion to refer the Whites Point project to the JRP. The job of a review panel member is to consider the information on the public record. The determination of likely SAEE after mitigation is context specific and must be based on the project's own characteristics examined with reference to the project's receiving environment. Therefore, Mr. Estrin's approach of comparing the findings of other projects that were approved is not an appropriate basis for predicting the Whites Point JRP's findings and recommendations absent the NAFTA breach.

3.0 Mr. Estrin's Comments With Respect to My Analysis of the Whites Point Project Do Not Change the Findings In My First Report

37. Based on my review of the public record, I am of the opinion that the Whites Point JRP could have reasonably concluded that the project would have likely resulted in SAEE on the right whale and lobster, taking into account proposed mitigation.³² In his Reply Report, Mr. Estrin takes issue with this analysis. In this section, I respond to his specific comments with respect to the information in the public record and explain why Mr. Estrin's analysis does not change any of the conclusions in my first report.

3.1. Analysis of the Project's Effects on North American Right Whales

³² RE-1, Griffiths Report I, Section 4.0.

38. In his Reply Report, Mr. Estrin argues that my analysis of the effects on right whales conflicts with the federal Department of Fisheries and Oceans' ("DFO's") statements in Undertaking #31.³³ Mr. Estrin also criticizes my interpretation of DFO's "allowable harm" assessment of right whales and argues that my analysis fails to take into account other comparator projects that were approved with right whales in the vicinity.

39. In Undertaking #31 DFO provided information on all relevant species listed in Schedule 1 of the Species at Risk Registry, which is an official list of wildlife species at risk in Canada.³⁴ In this document, DFO stated that the Grand Manan Basin had been determined to be possible critical habitat for right whales, that right whales are not commonly found in the immediate vicinity of the project, and that there were no recorded sightings in the 3 minute survey grid cells adjacent to the project.³⁵ DFO commented that the potential for vessel strikes associated with the project was considered "low" and that the increase in shipping noise in right whale habitats was expected to be "minimal."³⁶ It also stated that blasting has the potential to cause physical harm to animals within 500m of the project, but that mitigation should be effective in good weather and if applied rigorously.³⁷ Beyond 500m DFO indicated that behavioural effects could result, but that these would not necessarily be harmful. However, their confidence in this assessment was low.³⁸

40. In my view, DFO's response does not contradict the analysis in my first report. Although right whales may not be commonly found close to the project site,

³³ Estrin Reply Report, ¶¶ 162-186.

³⁴ C-417, Fisheries and Oceans Canada Response to Undertaking #31 from Joint Review Panel (Jun. 26, 2007), p. 1.

³⁵ C-417, Fisheries and Oceans Canada Response to Undertaking #31 from Joint Review Panel (Jun. 26, 2007), p. 7.

³⁶ C-417, Fisheries and Oceans Canada Response to Undertaking #31 from Joint Review Panel (Jun. 26, 2007), p. 8.

³⁷ C-417, Fisheries and Oceans Canada Response to Undertaking #31 from Joint Review Panel (Jun. 26, 2007), p. 8.

³⁸ C-417, Fisheries and Oceans Canada Response to Undertaking #31 from Joint Review Panel (Jun. 26, 2007), p. 8.

as DFO states, Bilcon acknowledged that they do sometimes move into nearshore waters,³⁹ and interveners at the hearings, including the Sierra Club of Canada and the operator of a local whale watching business, also provided evidence that right whales are sometimes present close to the shoreline.⁴⁰

41. The effectiveness of the proposed mitigation – a shore-based observer program to spot the presence of right whales within a 2.5 km safety zone – was also questioned by several interveners, including DFO who stated that it would be difficult to see whales in conditions of poor visibility (defined as fog, rain, waves, and winds at Beaufort scale 4 or higher – a moderate breeze), that observer fatigue would be an issue and that observations would be complicated by the fact that right whales may dive for 20 minutes at a time.⁴¹ In reaching my conclusion I considered that DFO’s statements in Undertaking #31 to the effect that mitigation should be successful if applied rigorously and in good weather must be considered in light of their comments regarding the weather conditions at the hearing.⁴² “Good weather,” meaning no fog, rain, waves, and no wind above a light breeze is not a common occurrence in the Bay of Fundy.

42. In my first report, I noted that DFO had categorically stated that there was “no allowable harm” with respect to right whales, which I interpreted to mean that the loss of a single animal due to project activities would be unacceptable.⁴³ Mr. Estrin criticizes my interpretation of this statement, and suggests that it was improper for me to rely on this statement in my determination of likely SAEE because DFO was “not addressing the issue of whether the WPQ project can

³⁹ **RE-1**, Griffiths Report I, ¶ 68.

⁴⁰ **RE-1**, Griffiths Report I, ¶ 86.

⁴¹ **RE-1**, Griffiths Report I, ¶ 84.

⁴² **C-417**, Fisheries and Oceans Canada Response to Undertaking #31 from Joint Review Panel (Jun. 26, 2007), p. 8.

⁴³ **RE-1**, Griffiths Report I, ¶ 77.

proceed, but rather the issue of when and if DFO would issue a permit that could allow harm to occur (an Incidental Harm Permit).”⁴⁴

43. It should be noted that in my first report my concern was determining what significance threshold would be reasonable with regards to effects on right whales. DFO may have made their remarks with respect to regulatory matters, but, in my opinion, their information was also useful and relevant in establishing a significance threshold. My interpretation of DFO’s “allowable harm” is also supported by conclusions drawn by the U.S. National Marine Fisheries Service as quoted in the Committee on the Status of Endangered Wildlife in Canada’s (“COSEWIC’s”), “Assessment and Update Status Report on the North Atlantic right whale *Eubalaena glacialis* in Canada.”⁴⁵ A COSEWIC status report is a technical document that compiles the best available information on a wildlife species’ status in Canada every ten years, or more often if required. This information is used in the process to assign status (for example, “threatened” or “endangered”). The definition of an endangered species under COSEWIC is that it is a species facing “imminent extirpation or extinction”.⁴⁶ COSEWIC’s report on right whales stated that “[u]nder the [Endangered Species Act] and [Marine Mammal Protection Act], the [National Marine Fisheries Service] produces annual stock assessments, which include for each stock the allowable “potential biological removal” (PBR) level. The current PBR for the western North Atlantic right whale population is zero whales per year.”⁴⁷ Given that the western North Atlantic right whale population is a single entity that moves between Canadian and U.S. waters, and that both countries are working on recovery plans, this opinion provided by the National Marine Fisheries Service is relevant

⁴⁴ Estin Reply Report, ¶¶ 174-181.

⁴⁵ **R-591**, *COSEWIC assessment and update status report on the North Atlantic right whale Eubalaena glacialis in Canada*, Committee on the Status of Endangered Wildlife in Canada (2003).

⁴⁶ **R-591**, *COSEWIC assessment and update status report on the North Atlantic right whale Eubalaena glacialis in Canada*, Committee on the Status of Endangered Wildlife in Canada (2003), p. vii.

⁴⁷ **R-591**, *COSEWIC assessment and update status report on the North Atlantic right whale Eubalaena glacialis in Canada*, Committee on the Status of Endangered Wildlife in Canada (2003), p. 17.

information when considering significance thresholds. Both of these statements (DFO and the National Marine Fisheries Service, as quoted by COSEWIC) in my view, reinforce the significance of the loss of a single whale.

44. I agree that an Incidental Harm Permit is only required to authorize harm to a listed species or a part of its critical habitat, and that in the absence of such a permit it is possible that the project could have still proceeded. However, my comments did not pertain to whether or not DFO would or would not allow the project to proceed through the granting of an Incidental Harm Permit. I have already explained that a review panel reaches its own conclusions and is not bound in any way to follow the conclusions that may be reached by government representatives (while acknowledging that government testimony is important to the process and should be considered carefully).

45. I maintain that the fact that DFO had determined that there should be “no allowable harm” to right whales is a highly relevant consideration in the determination of the significance threshold with respect to this species, whether or not a permit was required. Similarly, I was influenced in my findings by the fact that the potential biological removal was zero, as stated by COSEWIC.⁴⁸ The risk of extirpation for the right whale is pressing. There is considerable uncertainty about the effects of many activities, including the Whites Point project, on this animal. My decision was that a relatively lower significance threshold was entirely justified. Moreover, it is important to note that, while it is reasonable for a panel to conclude that any negative effect on a highly endangered species is a significant effect, this does not mean that, automatically, the project cannot proceed. The determination of an SAEE means that government decision-makers must consider whether the SAEE is justified in the circumstances.

⁴⁸ **R-591**, *COSEWIC assessment and update status report on the North Atlantic right whale *Eubalaena glacialis* in Canada*, Committee on the Status of Endangered Wildlife in Canada (2003), p. 17.

46. Given that the population of right whales at the time of the Whites Point panel review was in the order of 350 animals, it would not be unreasonable for a panel to decide that, for the purposes of the SAEЕ determination, the project should not substantially contribute to the loss of a single animal, and also to set a low threshold with respect to the tolerance of risk. To be clear, this means that uncertainty around the effects of an activity on a species that is numerous and in no danger of extinction may be tolerated. Uncertainty with regards to the effects on an endangered species may not be tolerated. This latter approach was in fact my position when reaching a decision about the likelihood of an SAEЕ.

47. Lastly, Mr. Estrin argues that I have failed to take into account other projects that were approved with right whales in the vicinity. Specifically, he has identified four projects, Black Point Quarry and Marine Terminal (“Black Point Quarry”), Belleoram Quarry and Marine Terminal (“Belleoram”), Bear Head LNG Facility (“Bear Head”) and Fundy Tidal Demonstration Project (“Fundy Tidal”), which are in his view, “comparable” to the Whites Point project.⁴⁹

48. In section 2.0, I have explained why projects are not comparable. However, even if Mr. Estrin’s argument was valid and setting aside the fact that his “comparator” projects had only occurred *after* the Whites Point review and that none of the projects were assessed by a review panel, there are clear reasons why the projects he cites are not in fact comparable with respect to the right whale.

49. In his Witness Statement, Mr. Mark McLean, Manager of the Fisheries Protection Program in the Maritime Regional Office at DFO, states that the Bay of Fundy provides habitat used by a large portion of the population of endangered right whale for feeding, birthing and a nursery area.⁵⁰ In contrast, the Black Point Quarry and Bear Head projects were located in Chedabucto Bay. While large whales may transit through Chedabucto Bay, sightings of right whales are much lower here

⁴⁹ Estrin Reply Report, ¶¶ 187-227.

⁵⁰ **RW-1**, Witness Statement of Mark McLean, November 6, 2017, ¶ 6.

than in the Bay of Fundy. The main whale species in Chedabucto Bay are fin whales and minke. Neither species is endangered. The Atlantic population of the fin whale is listed as a species of special concern.⁵¹ In Mr. McLean's Witness Statement he states that a species of special concern means a wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.⁵² The basic prohibitions against harming a species or its residence and the prohibition against destruction of critical habitat do not apply (as they do to endangered species). Accordingly, the provincial Decision Statement on the Black Point Quarry project makes no reference to whales in the terms and conditions;⁵³ and the federal Decision Statement requires the proponent to mitigate the risk of collision between ships and whales by "conducting and recording observations", maintaining an appropriate speed profile, and reporting any collisions.⁵⁴

50. The Bear Head Registration Document indicated that sightings of right whales only rarely occurred in the area off Guysborough.⁵⁵ Since the project design for this project was substantially the same as what was previously proposed and approved by the Agency, the *CEAA, 2012* was determined not to apply to the project's LNG component.⁵⁶ The provincial decision statement only makes general

⁵¹ **RW-1**, Witness Statement of Mark McLean, November 6, 2017, ¶ 6; and **R-773**, Government of Canada website excerpt, Species at Risk Public Registry, Schedule 1, Fin Whale Atlantic population Species Profile (May 2005).

⁵² **RW-1**, Witness Statement of Mark McLean, November 6, 2017, ¶ 12.

⁵³ **C-1430**, Nova Scotia Environmental Assessment Approval, Black Point Quarry Project (Apr. 26, 2016).

⁵⁴ **C-1333**, Canadian Environmental Assessment Agency, Decision Statement Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012*, to Black Point Aggregates Incorporated for the Black Point Quarry Project (Apr. 26, 2016), ss. 3.6, 3.6.1, 3.6.2, 3.6.3.

⁵⁵ **R-774**, Bear Head LNG, Updated Registration Document (Apr. 1, 2015) (excerpt), Figure 4-21 on p. 4-60.

⁵⁶ **R-775**, Christopher E. Smith, "Bear Head LNG exempted from 2012 environmental act", Oil & Gas Journal (Feb. 16, 2015).

conditions with respect to confirming the presence of species of risk and developing appropriate avoidance and mitigation.⁵⁷

51. In my view, the Black Point Quarry and Bear Head projects are not comparable projects because for the most part right whales are not in the vicinity of the project site, and there is no critical habitat in the area. The risks concerning endangered right whales in the context of the Whites Point project are simply not comparable to fin whales and minke in Chedabucto Bay.

52. The scope of the federal environmental assessment of the Belleoram project (like Whites Point, a quarry and a marine terminal) was limited to the marine terminal only. Therefore the comprehensive study did not address the operations of the quarry including blasting, although the construction of the terminal itself would require limited blasting.⁵⁸ The federal Comprehensive Study Report identifies the North American right whale as one of the species at risk to be considered in terms of possible ship strikes.⁵⁹ The mitigation measure proposed and accepted was for the bulk carriers to maintain a speed of 2 knots in Belle Bay itself, but it was acknowledged that for safety reasons bulk carriers would have to operate at a minimum speed of 13 knots outside the bay.⁶⁰ However, once again the COSEWIC map showing sightings of right whales throughout the Atlantic region indicates that right whales are not known to frequent the area of the quarry on a regular basis.⁶¹ To be exact, no sightings are recorded along this part of the southern Newfoundland coast. This is not to say that individual animals may not migrate through the area occasionally, but the stark contrast with the Bay of Fundy is obvious. The Belleoram

⁵⁷ **R-776**, Province of Nova Scotia Environmental Assessment Approval, Bear Head LNG Project (May 15, 2015), Condition 2.6.

⁵⁸ **R-357**, Belleoram Marine Terminal Project, Comprehensive Study Report (Aug. 23, 2007), p. VI.

⁵⁹ **R-357**, Belleoram Marine Terminal Project, Comprehensive Study Report (Aug. 23, 2007), pp. 99, 103.

⁶⁰ **R-357**, Belleoram Marine Terminal Project, Comprehensive Study Report (Aug. 23, 2007), p. 106.

⁶¹ **RW-1**, Witness Statement of Mark McLean, November 6, 2017, ¶¶ 5-6.

project is simply not comparable to Whites Point because it did not assess operational blasting and because right whales are not present in any numbers.

53. Unlike the Whites Point project, Fundy Tidal is not a quarry project and no blasting would be involved. Nor did it entail weekly movement of large vessels over a 50 year period.⁶² The project is located in the Minas Basin. The map of right whale sightings developed by COSEWIC and included in Mark McLean's Witness Statement shows no sightings in this area.⁶³ This project is therefore not comparable to the Whites Point project.

54. As explained in my first report, my conclusions regarding a potential SAEE to right whales were based on my assessment of the risks of blasting effects and also my understanding that an increase in shipping in the area would increase the risk of ship strikes.⁶⁴ I acknowledged that the increased risk would likely be small, but would still play into the overall cumulative effect on this endangered species. Furthermore, while further mitigation may have been possible, such as requiring vessels to maintain low speeds at all times, as stated, this would probably not be something the proponent could control, and as a condition it would need to be made part of a marine regulation to cover all shipping traffic.⁶⁵ The possibility of such mitigation measures, however, do not alleviate my concerns regarding the uncertainty of blasting effects on right whales and the lack of effectiveness of Bilcon's proposed observer program.

⁶² **C-1427**, Environmental Assessment Registration Document – Fundy Tidal Energy Demonstration Project, Volume I: Environmental Assessment (Jun. 2009), pp. 120, 149, 162 (at p. 149: “Marine construction (and decommissioning) activities will require large vessels and barges for turbine deployment and cable installation. Activities are expected to be of short duration (*i.e.*, days) and intermittent, given the proposed schedule. Vessel traffic during operations and monitoring is also expected to be of short duration and intermittent, and will use smaller vessels.”).

⁶³ **RW-1**, Witness Statement of Mark McLean, November 6, 2017, ¶¶ 5-6, citing to **R-769**, Whalesitings Database, Population Ecology Division, Fisheries and Oceans Canada, Dartmouth, NS, [2017/10/11].

⁶⁴ **RE-1**, Griffiths Report I, ¶¶ 87-95.

⁶⁵ **RE-1**, Griffiths Report I, ¶ 90.

3.2. Analysis of the Project's Effects on American Lobster

55. Mr. Estrin argues that my analysis of the Whites Point project's impacts on lobster fails to consider the federal governments' acceptance of the *Ballast Water Control and Management Regulations* ("Regulations") as a sufficient means of mitigation in subsequent environmental assessments.⁶⁶ However, his reliance on the findings in other environmental assessments fails to take into consideration the unique circumstances in the Whites Point project, which resulted in the Whites Point JRP's determination that the regulations were inadequate, and also draws unsupported conclusions from the fact that the federal government did not follow up on the JRP's recommendation that the Regulations should be amended.

56. Bilcon's own analysis acknowledged the presence of problematic species in the destination area in New Jersey and proposed no mitigation or monitoring, claiming that the effect of the project on the likelihood that invasive species would be transported to Digby Neck would be neutral because the management of ballast water would be the responsibility of the shipping company rather than of the proponent.⁶⁷ This argument has no bearing on the potential for invasive species to enter Nova Scotia waters, and merely states that (in Bilcon's view) the proponent is not responsible. Bilcon does not explain the mechanism by which the shipping company could ensure that no invasive species would be transported by the vessels either on the hulls or in ballast water. In fact, it could be argued that the shipping company would have less of a vested interest in protecting local waters than Bilcon as they would not be present in the local community and dependent on good relations with local government and residents. Perhaps (it is not clear) Bilcon was attempting to argue that something that was not directly under their care and control could not be considered an effect of the project.

⁶⁶ Estrin Reply Report, ¶¶ 228-241.

⁶⁷ **RE-1**, Griffiths Report I, ¶ 103, citing to **R-579**, Whites Point Quarry & Marine Terminal, Environmental Impact Statement, Volume VI (Mar. 31, 2006), Chapter 9.2.14, p. 135.

57. In assessing risk, it is crucial to know what restorative measures may be available should an adverse environmental effect occur. DFO told the JRP that, depending on the species, there may well be no mitigation possible to stop the spread once an invasive species has been accidentally introduced.⁶⁸

58. Again, it should be noted that Bilcon did not propose to carry out any form of monitoring for invasive species. While monitoring measures could have been included as part of the terms and conditions, this would not change my assessment of the project's effects. It is important to distinguish between monitoring and mitigation. Mitigation is about measures intended to reduce predicted effects; monitoring is about measuring effects. Monitoring by itself is not mitigation, unless there are feasible and effective mitigation measures that can be applied should a problem be detected while monitoring.

59. The Whites Point JRP also heard testimony from the Lobster Fishing Area 34 Management Board ("LFA 34"), who said that the St. Lawrence Seaway has used a preventative approach and still has to deal with new invasive species every year.⁶⁹ Evidence was also provided to the JRP that the lobster industry in Southwest Nova Scotia is a hugely valuable resource that supports many communities.⁷⁰ The risk from invasive species was seen to be of regional significance. Arguably, a negative and persistent effect on the valuable regional fishery would have provincial repercussions as well.

60. Mr. Estrin's arguments, in this regard, do not address the risks specific to the Whites Point project. Rather he relies on the fact that, in other environmental

⁶⁸ **R-463**, Whites Point Quarry and Marine Terminal Public Hearing Transcript, Day 4, Volume 4 (Jun. 20, 2007), pp. 777:23-778:2.

⁶⁹ **R-275**, LFA 34 Management Board, Presentation to the Joint Review Panel, Whites Point Quarry and Marine Terminal Project (Jun. 27, 2007), p. 6.

⁷⁰ **RE-1**, Griffiths Report I, ¶¶ 96-97; **R-212**, JRP Report, p. 76; **R-279**, Digby Neck/Islands Economic Profile, Submitted by: Gardner Pinfold Consulting Economists Ltd. (Feb. 2006), p. 12; **R-592**, Canadian Parks and Wilderness Society, Nova Scotia Chapter (CPAWS-NS), Review of the Whites Point Quarry and Marine Terminal Environmental Impact Statement (Aug. 11, 2006), p. 16; **R-275**, LFA 34 Management Board, Presentation to the Joint Review Panel, Whites Point Quarry and Marine Terminal Project (Jun. 27, 2007), p. 1.

assessments, the federal government appeared to be satisfied that the *Ballast Water Control and Management Regulations* (newly introduced at the time of the Whites Point panel review) would be sufficient to reduce the risk of invasive species being introduced.

61. His evidence for the satisfaction of the federal government consists of (a) DFO's statement to the JRP that the Regulations "will help reduce the risks of introductions", (b) the federal government's acceptance of the Regulations as sufficient mitigation for other subsequent quarry projects that Mr. Estrin has labelled as comparable, and (c) the fact that the federal government took no action to implement the JRP's recommendation that the Regulations should be strengthened.⁷¹

62. With respect to (a), I would completely agree with DFO's statement. Clearly the Regulations would help reduce the risk of reductions, though some risk would remain. However, in applying a context specific analysis of a project's effects, the issue is whether the risk reduction would be sufficient over the life of the project. Based on my review of the Whites Point public record, both DFO and LFA 34 provided evidence that invasive species continue to be an ongoing problem in other areas in spite of preventative measures.⁷² As noted in my first report, the regulations only required 95% of the ballast water to be exchanged. This means that 5% could still be an effective conduit for an invasive species that would be impossible to remove and could eventually affect a whole fishery in the region.⁷³

63. With respect to (b), as I have explained above in section 2.0(c), a panel is not bound, nor indeed influenced, by decisions made regarding other projects, in other contexts, through other types of environmental assessment process. While a panel should carefully consider all evidence brought before it, including the evidence of government departments, it is not in any way bound to accept the views of

⁷¹ Estrin Reply Report, ¶¶ 229, 232, 235.

⁷² **RE-1**, Griffiths Report I, ¶¶ 111-113, 116 (3rd bullet).

⁷³ **RE-1**, Griffiths Report I, ¶ 120.

government departments. On the contrary, it should exercise its own judgment. This judgment may in fact sometimes result in a disagreement with the views of a government department. It is hardly surprising that a government department would defend its own regulations. It does not necessarily mean that the regulations are perfect, or totally appropriate and effective in every situation. The light that an independent panel can shed on such matters, from a sustainability perspective, is, in my view, one of the benefits of the panel review process.

64. This leads to (c) and conclusions that can be drawn from the fact the government did not immediately respond to the JRP's recommendations regarding strengthening the *Ballast Water Control and Management Regulations*. Mr. Estrin assumes that this means that the Regulations are completely effective. However, contrary to Mr. Estrin's statements, the federal government had in fact, accepted the JRP's recommendation, stating:

The Government of Canada accepts this recommendation.

Transport Canada recognizes the importance of applying the appropriate ballast water management measures in order to avoid and/or minimize the introduction of invasive species into waters under Canadian jurisdiction, from foreign waters.

After extensive consultations with industry, environmental groups, stakeholders and other federal agencies, Transport Canada, in June 2006, implemented Ballast Water Control and Management Regulations under the *Canada Shipping Act*. These regulations are intended as an important **first step** in minimizing the risk of introducing harmful aquatic species into Canadian waters. Transport Canada will **continue to consult with the appropriate federal authorities and work with the industry, scientific community and environmental groups, and will consider any recommendations made with respect to improving the Ballast Water Control and Management Regulations.**⁷⁴

⁷⁴ R-383, The Government of Canada's Response to the Environmental Assessment Report of the Joint Review Panel on the Whites Point Quarry and Marine Terminal Project (Dec. 17, 2007), p. 3 (emphasis added).

65. At the time of the Whites Point environmental assessment, the regulations had only just been introduced by the federal government in June 2006.⁷⁵ Nevertheless, the Government of Canada stated that it would consider the JRP's recommendation and continue to consult with stakeholders. Since the Whites Point project was rejected, there may not have been a pressing need to move on this recommendation. However this statement is interpreted, it still does not mean that the JRP is not at liberty to disagree with the federal government's opinion. There is a fundamental difference between the determination of SAEE and the process of rendering regulatory approval.

66. Mr. Estrin has taken a similar tack in criticising my conclusions regarding the impacts of blasting on lobster by referring to decisions made by DFO with respect to "comparable" quarry projects that subsequently received regulatory approval some years after the Whites Point review.⁷⁶ Specifically, he notes that DFO recommended ongoing monitoring and he was puzzled that I did not accept this as adequate mitigation.⁷⁷

67. In the evidence presented to the Whites Point JRP, DFO stated that the effects of blasting on lobsters were uncertain, because there was only a small amount of research available that pertained to seismic activity, not blasting, and this did not address all life stages of the lobster. Nevertheless, this research indicated potential negative effects.⁷⁸ DFO recommended monitoring, not of the *effects* of the blasting on lobster at all life stages, but to measure actual blast pressure in the water from operational blasting. This would definitely be valuable information but would not constitute mitigation. Monitoring is not mitigation. It can be a tool to assist adaptive management. But, again, adaptive management is not mitigation unless mitigation

⁷⁵ **R-383**, The Government of Canada's Response to the Environmental Assessment Report of the Joint Review Panel on the Whites Point Quarry and Marine Terminal Project (Dec. 17, 2007), p. 3.

⁷⁶ Estrin Reply Report, ¶¶ 242-253.

⁷⁷ Estrin Reply Report, ¶¶ 242-243.

⁷⁸ **RE-1**, Griffiths Report I, ¶ 114.

measures are clearly defined including the thresholds at which they would be implemented. Without any of that, adaptive management is a vague promise to “do something” in the future.

68. In the context of the Whites Point project, little was known about the effects of blasting on lobster, and no effective mitigation has been proposed by either the proponent or DFO.⁷⁹ In my view, saying that the project could go ahead but should be monitored is tantamount to carrying out a large-scale experiment, potentially at the expense of lobster and lobster fishers. My conclusion was that, because of the risks posed by the potential for harmful invasive species to be introduced, even considering the mitigation provided by the *Ballast Water Control and Management Regulations*, and because there was considerable uncertainty about the effects of blasting on lobster with apparently no effective mitigation, it would be reasonable to conclude that this would likely be a SAEE. While Mr. Estrin may disagree with my conclusion, the steps by which I have drawn these conclusions are consistent with my experience in other panels. And again, as pointed out for my conclusions regarding the effects of the project on right whales, a finding of likely SAEE for lobster would not automatically mean that the project should not proceed, but rather that the project should be assessed in terms of the overall justification of the SAEE.

69. As with right whales, Mr. Estrin has alluded to the way in which other environmental assessment decisions have dealt with potential project effects to lobsters related to the risk of invasive species being introduced. In this regard, Mr. Estrin cites the Black Point Quarry in Nova Scotia and the Belleoram project in Newfoundland.

70. The Black Point Quarry Environmental Assessment Report prepared by Agency described the *Ballast Water Control and Management Regulations* and indicated that they considered that they would “effectively mitigate potential effects

⁷⁹ RE-1, Griffiths Report I, ¶¶ 105, 115, 118-119.

and the likelihood of those effects, resulting from the release of non-compliant ballast water associated with the Project”.⁸⁰ Interestingly the report also stated that “[i]n 2004, the International Maritime Organization adopted the *International Convention for the Control and Management of Ships’ Ballast Water and Sediments, 2004*. This Convention introduced a performance standard for ballast water treatment and called for the eventual phasing out of ballast water exchange. However, as indicated by the proponent, it is not yet in force.”⁸¹ This international convention obviously recognizes the limitations of ballast water exchange.

71. The main difference between the Whites Point and Black Point Quarry projects with respect to potential effects on lobster relates mainly to the much larger population of lobster in the area of Digby Neck compared to the waters of Chedabucto Bay, as shown in the significant difference in landed lobster by weight. In his Witness Statement Mr. McLean states that the landed weight of lobster in grid 80 adjacent to Whites Point during the period 2005-2016 ranged from 241 to 646 metric tonnes.⁸² In grid 340 adjacent to the Black Point Quarry site, 5 to 109 metric tonnes of lobster were landed during the same period. During the relevant time period for each project (2007 for Whites Point and 2016 for Black Point Quarry), there was 346% more lobster landings in grid 80 than in grid 340.⁸³ In 2007 there were 52 lobster fishing licences in grid 80. In the comparable time period (2016) at the Black Point Quarry site there were 8 licences. Therefore there was more than five times the number of licences in the grid that included the Whites Point project site.⁸⁴ In short, the lobster fishery (and by implication, the lobster resource) in the area of the Whites Point project is much larger than the fishery in Chedabucto Bay.

⁸⁰ **C-1331**, Black Point Quarry Project, Environmental Assessment Report (Apr. 2016), p. 43.

⁸¹ **C-1331**, Black Point Quarry Project, Environmental Assessment Report (Apr. 2016), p. 43.

⁸² **RW-1**, Witness Statement of Mark McLean, November 6, 2017, ¶ 17, citing to **R-777**, Fisheries and Oceans Canada, unpublished fisheries data, October 2017.

⁸³ **RW-1**, Witness Statement of Mark McLean, November 6, 2017, ¶ 17.

⁸⁴ **RW-1**, Witness Statement of Mark McLean, November 6, 2017, ¶ 18.

72. In my opinion, this has a valid influence on the assessment of risk. Decision-makers would need to address the risk that an industry employing approximately 34 people (the proposed quarry) could affect the livelihoods of up to 50 people if paralytic lobster disease, endemic in Raritan Bay, took hold. If the disease then spread further in the region as is not improbable given the movement of water in the Bay of Fundy, then the potential impact becomes even more serious. In Year 1 of the project the risk may seem very low; by Year 50 the likelihood that an invasive species will have travelled inside or outside the hull of a bulk carrier at some point during the life of the project may be much higher.

73. A striking difference in the environmental assessments carried out for both projects is that only the Whites Point Environmental Impact Statement addressed the presence of potential problem species in an area where the bulk carriers would be taking on ballast water.⁸⁵ There is no mention of this in the Black Point Quarry Environmental Assessment Report.⁸⁶ Similarly the Belleoram Comprehensive Study Report did not identify where the bulk carriers from the project would be travelling other than to “various international markets.”⁸⁷ The Belleoram report did not address invasive species, merely stating that no foreign ballast would be dumped in the waters of Belle Bay and that they would adhere to all regulations under the *Canada Shipping Act*.⁸⁸ In the Decision Statement the Minister of Environment said that no further mitigation would be necessary.⁸⁹ I cannot accept, as Mr. Estrin is

⁸⁵ **RE-1**, Griffiths Report I, ¶ 101.

⁸⁶ **C-1331**, Black Point Quarry Project, Environmental Assessment Report (Apr. 2016); **C-1333**, Canadian Environmental Assessment Agency, Decision Statement Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012*, to Black Point Aggregates Incorporated for the Black Point Quarry Project (Apr. 26, 2016).

⁸⁷ **C-190**, Belleoram Marine Terminal Project, Comprehensive Study Report (Aug. 23, 2007), p. 4.

⁸⁸ **C-190**, Belleoram Marine Terminal Project, Comprehensive Study Report (Aug. 23, 2007), pp. 22, 88. It should be noted that adhering to regulations does not constitute mitigation. It is not optional and simply becomes part of the day-to-day project activity. To do otherwise is to break the law. Environmental assessment assesses the effects of the project, with all required legal compliance, and then looks at the additional effect of mitigation measures.

⁸⁹ **C-1329**, Canadian Environmental Assessment Agency, Environmental Assessment Decision Statement, Belleoram Marine Terminal Project (Nov. 22, 2007).

suggesting I should, that a Comprehensive Study Report that provides no information about the potential for the introduction of invasive species is comparable to a panel review that examined the issue in some depth, including a technical report submitted by the proponent and evidence given in public hearings by government representatives and professional fishers.

4.0 The Use of Terms and Conditions Are Only Appropriate If They Constitute Adequate and Effective Mitigation

74. According to Mr. Estrin, my analysis of the Whites Point JRP's potential findings and recommendations absent the NAFTA breach fails to consider and apply the "standard EA review and approval practices" of applying mitigation measures and using terms and conditions to address issues relating to inadequate information or uncertainty.⁹⁰ His criticisms fail to take into account my conclusions that the Whites Point JRP reasonably concluded that the proposed mitigation measures were inadequate and ineffective.

75. Under the *CEAA*, panels are required to recommend any mitigation measures that are technically and economically feasible and that might render an effect insignificant.⁹¹ If a project is approved, the responsible authority is required to ensure appropriate mitigation measures are implemented.⁹² The "standard practice" for a review panel is identified in written documents. The first is a document prepared by the Agency called "Your Role in an Assessment by a Review Panel: A Guide for Chairpersons and Members".⁹³ The second is a guideline issued by the former Minister of the Environment, the Honourable Christine S. Stewart, titled "Procedures for an Assessment by a Review Panel."⁹⁴ My understanding is that

⁹⁰ Estrin Reply Report, ¶¶ 324-370.

⁹¹ **R-1**, Griffiths Report I, ¶ 42, referring to **R-1**, *Canadian Environmental Assessment Act*, S.C. 1991, c. 37 ("*CEAA*"), s. 16(1)(d).

⁹² **R-1**, *CEAA*, s. 20(1)(a).

⁹³ **R-32**, *Your Role in an Assessment by a Review Panel: A Guide for Chairpersons and Members*, Canadian Environmental Assessment Agency (Jul. 2001).

⁹⁴ **R-26**, *Procedures for an Assessment by a Review Panel*, A guideline issued by the Honourable Christine S. Stewart, Minister of the Environment (Nov. 1997).

neither of these documents advises or requires a review panel to use terms and conditions to remove all findings of SAEE.

76. As noted in the CEAA Reference Guide, “in *all* cases, significance and the related matters are determined only after taking into account any mitigation measures the RA considers appropriate. In other words, no final determination can be made about the significance of the likely adverse environmental effects or the related matters unless the implementation of any appropriate mitigation measures has been considered.”⁹⁵ Accordingly, my analysis of the environmental effects of the Whites Point project on right whales and lobsters expressly considered the availability of mitigation measures and use of terms and conditions to address potential impacts.

77. The mitigation measures I considered were those that were on the public record, either in the panel report or in the submissions or hearing transcripts.⁹⁶ In evaluating mitigation measures, a panel will consider the mitigation measures proposed by the proponent. It may also take into account the mitigation measures proposed by government officials and members of the public. While Mr. Estrin suggests that the standard practice of review panels is to rely on terms and conditions to “avoid” findings of likely SAEE, a review panel has no obligation to seek mitigation beyond what has been presented to it in written and oral submissions.

78. Reliance on mitigation measures and the use of terms and conditions are only appropriate if they constitute adequate and effective mitigation. However, based on my review of the public record, I did not see evidence of feasible mitigation measures that would, as Mr. Estrin puts it, “avoid” my findings of likely SAEE on right whales and lobsters.⁹⁷ In my view, the Whites Point JRP reasonably concluded

⁹⁵ **R-20**, CEAA Reference Guide, p. 186.

⁹⁶ See for example, **RE-1**, Griffiths Report I, ¶¶ 88-93, 119-126.

⁹⁷ For example, in my first report I considered it to be unreasonable to allow the project to proceed while long-term research was conducted on the impacts of blasting on whales,

that the proposed mitigation measures would not adequately and effectively address the project's environmental effects. Having reached this conclusion, it was therefore reasonable for the panel not to recommend these measures to the Minister given they would not have "avoided" a likely SAEE finding.

79. This conclusion was analogous to the finding made by the Lower Churchill Panel with regard to the Red Wine Mountain caribou herd. The panel stated that "[b]ased on the imperiled status of the Red Wine Mountain caribou herd and the uncertainty and disagreement over the range of factors that might be important for its recovery, the Panel concludes that any adverse effects of the Project on individual animals within the Red Wine Mountain caribou herd would be significant".⁹⁸ The panel then made a finding of likely SAEE for this caribou herd. It should be pointed out that the panel made two recommendations, should the project be approved—one that would be a condition placed on the proponent regarding road construction and decommissioning, and one that was directed to the provincial Department of Environment and Conservation regarding the recovery process.⁹⁹ Neither of these recommendations nullified the finding of likely SAEE.

80. Regarding the issue of uncertainty, Mr. Estrin comments that the uncertainties I have cited (presumably in part with respect to the effects of blasting on both right whales and lobsters) are "by no means unique" and advises that I

especially considering that COSEWIC's determination that the threshold for potential biological removal for the right whale should be zero. I concluded that the proposed Whites Point observer program would not be effective in reducing harm to whales. With regards to risk of invasive species in the project area, I was of the view that the ballast water regulations were inadequate since the remaining five percent of the ballast water that would not be exchanged could import invasive species. Furthermore, I considered the Whites Point JRP's assessment that the proponent's proposed design of its management of sediment ponds did not adequately address issues relating to climate change, that the proposed protocols to manage residual amounts of ammonium nitrate fuel oil (ANFO) would not actually minimize the loss of explosives in surface waters and groundwater and that the proposed surface water retention structures would not retain fine sediments and dissolved contaminants during extreme climate events, to be reasonable.

⁹⁸ **C-681**, Report of the Joint Review Panel, Lower Churchill Hydroelectric Generation Project, Nalcor Energy, Newfoundland and Labrador, August 2011, p. 117.

⁹⁹ **C-681**, Report of the Joint Review Panel, Lower Churchill Hydroelectric Generation Project, Nalcor Energy, Newfoundland and Labrador, August 2011, pp. 117-118.

should have “taken the usual approach” that I have “consistently taken” when serving as a panel chair.¹⁰⁰ He characterizes this approach as requiring consideration of decisions made for similar projects and then applying mitigation or terms and conditions in accord with those decisions.

81. In arguing that my customary practice is always to include terms and conditions, Mr. Estrin refers to the fact that, for two out of three reviews I have chaired, the panel recommended that the project should proceed and included additional recommendations regarding terms and conditions.¹⁰¹ Neither of these panels determined that there would be likely SAEs.

82. In the third project that I chaired, the panel made no comment on whether the project should proceed (it was not obliged to do so by its terms of reference) but did identify SAEs and did recommend terms and conditions. The Lower Churchill panel determined that the hydroelectric project would have six likely SAEs (two of these were contingent on consumption advisories being required in Lake Melville due to increased mercury).¹⁰² The panel also made 83 recommendations regarding both potential terms and conditions for the proponent and recommended actions to be carried out by other parties. Some of these recommendations related to reducing the project’s effect on key Valued Ecosystem Components but did not remove the necessity, in the panel’s eyes, of declaring likely SAEs.¹⁰³ This demonstrates that the listing of terms and conditions does not “avoid” a finding of likely SAE in all cases. One example already cited above, was the finding of SAE with respect to the Red Wine Mountain caribou herd. Other examples include a finding of likely SAE for wetland and riparian habitat even after JRP recommendations to develop both a

¹⁰⁰ Estrin Reply Report, ¶¶ 418-419.

¹⁰¹ Estrin Reply Report, ¶¶ 341-346, 362, 370.

¹⁰² **C-681**, Report of the Joint Review Panel, Lower Churchill Hydroelectric Generation Project, Nalcor Energy, Newfoundland and Labrador, August 2011, p. xii.

¹⁰³ **C-681**, Report of the Joint Review Panel, Lower Churchill Hydroelectric Generation Project, Nalcor Energy, Newfoundland and Labrador, August 2011, Appendix 1: List of Recommendations.

wetland and a riparian compensation plan,¹⁰⁴ and a finding of likely SAEE to culture and heritage even after JRP recommendations to involve Aboriginal groups in management and protection initiatives, commemorate history and heritage, and involve local communities and Aboriginal groups in naming Project-related features.¹⁰⁵

83. Regardless of the terms and conditions and mitigation measures that may have been applied in other environmental assessments, it is not the duty of the panel to “solve” potential effects with terms and conditions – especially when the proponent has not proposed workable mitigation. As stated above, the role of a federal review panel is to evaluate the information that is before it, and make determinations with respect to a project based on its own merits. Where there are no feasible and effective mitigation measures, then the panel must assess residual effects without mitigation - because there is none.

84. Ultimately the recommendation of terms and conditions is at the discretion of the review panel. The Whites Point JRP concluded that that the project should not proceed and therefore did not recommend any terms and conditions in its report.¹⁰⁶ In my subsequent review of the public record I concluded that it would be reasonable to make a finding of SAEE in two areas, after reviewing the proposed mitigation and finding it inadequate. I was not able to identify any additional terms and conditions that would nullify the finding of likely SAEE.

85. In the case of Whites Point project, given the current state of knowledge, the perilous situation of the right whale, and the importance of the lobster industry, there was no adequate and effective mitigation available that was sufficient to reduce the project’s residual effects. In these circumstances, my determination that the Whites Point JRP could have reasonably concluded that the

¹⁰⁴ **C-681**, Report of the Joint Review Panel, Lower Churchill Hydroelectric Generation Project, Nalcor Energy, Newfoundland and Labrador, August 2011, pp. 99-100.

¹⁰⁵ **C-681**, Report of the Joint Review Panel, Lower Churchill Hydroelectric Generation Project, Nalcor Energy, Newfoundland and Labrador, August 2011, pp. 186-189.

¹⁰⁶ **R-212**, JRP Report, p. 4.

project would have likely resulted in SAEF on the right whale and lobster does not include the recommendations of any terms or conditions or proposed mitigation measures.

SIGNED at Halifax, NS
November 6, 2017



Lesley Griffiths