Enbridge Northern Gateway Project
JRP Hearing Notes

Day 85 – April 24, 2013 – Prince Rupert – Vol 169

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Dr. Carl Brown	Ms. Coral deShield	Mr. Chris Doyle
Dr. Dan Esler	Mr. Grant Hogg	Dr. Bruce Hollebone
Mr. Richard Holt	Dr. Ali Khelifa	Ms. Laura Maclean
Mr. Ken Morgan	Dr. Patrick O'Hara	Dr. Barry Smith
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Government of Canada Panel 2

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Examination by Ms. Joy Thorkelson for UFAWU (continued) 19296

DFO's analysis of NGP's risk assessment

Noting comments related to primary pathway of effects (POE) in DFO's submission, Ms. Thorkelson asked if the Department had conducted a risk assessment on the impacts of an oil spill on fish, fish habitat and fisheries. Mr. Engelsjord answered that it had not. 19296

Ms. Thorkelson stated, "DFO says that Enbridge has done a reasonable risk assessment on the impacts of an oil spill on fisheries resources", but noted that DFO Science had made statements indicating the Department was not satisfied with NGP's spill response modelling in the QRA, and the resulting conclusions, as seen in Exhibit E9-21-09, page 64. Ms. Antcliffe acknowledged the DFO Science concerns, which were part of the Department's evidence, but that the context had changed. 19303-19317

Ms. Thorkelson asked further questions about DFO's analysis and request for additional information related to NGP's spill trajectories, as seen in Exhibit B46-2, Adobe 174. Ms. Antcliffe indicated that NGP had committed to provide the information that DFO and Environment Canada had requested. 19319

Referring to the previous day's conversation, Ms. Thorkelson asked how DFO had used information from the Proponent to make its assessment that NGP had conducted a

reasonable risk assessment. Ms. Antcliffe spoke about NGP's use of an internationally recognized risk assessment methodology. 19350

Impact of oil spills on Canada's fisheries

Ms. Thorkelson asked if DFO was satisfied with NGP's assessment having taken into account the effects and significance of malfunctions or accidents, which is required for consideration under Section 19 of the CEA Act. Mr. Engelsjord answered that DFO was providing technical advice, and was not responsible for all components. Ms. Antcliffe commented that there are multiple agencies involved in the responsibility for spill prevention, planning, and response. 19360

Noting that the Department had not provided an analysis on the significance of an oil spill on commercial fisheries, Ms. Thorkelson asked if DFO had satisfied its mandate "to provide Canadians with a sustainable fisheries resource". Ms. Antcliffe answered that the effects of oil spills on commercial fisheries couldn't be answered without knowing certain information components from other departments, such as fate and behaviour of the products. 19380

Ms. Thorkelson followed up, asking which Canadian department has responsibility for analyzing whether the Project will leave Canada with a sustainable fisheries resource. Ms. Antcliffe again spoke about the multi-agency approach to understanding the spill regime. Ms. Thorkelson again noted the lack of assessment by DFO on impacts to commercial fisheries and Ms. Antcliffe again answered that the Department had not conducted an assessment on the subject, and that only an assessment related to fish and fish habitat impacts had been done. Similar discussion ensued. 19386

Ms. Thorkelson asked if DFO had reviewed the social and economic impacts of the Project on sustainable fisheries, as mandated by the Department. Ms. Antcliffe answered that it had not. Mr. Engelsjord answered that the witnesses were not aware of any other federal department giving advice to the Panel on social and economic impacts on fisheries. 19410

Ms. Thorkelson asked, "In light of DFO's mandate and responsibilities, is it sufficient that DFO offers no opinion on the impact of an oil spill on commercial fisheries or on the socio-economic …conditions of North Coast communities which are dependant on the commercial fishery?" Ms. Anderson objected to the question, and Ms. Thorkelson provided further argument for her line of questioning. The Chairperson stated that the line of questioning was helpful to the Panel, and asked that it continue. 19416

Ms. Antcliffe responded, stating that DFO reviewed potential impacts of the Project on fish and fish habitat from construction and operation, submitting the Department's belief that risks can be managed through mitigation, offsetting, monitoring and research. She again noted that the Department is not the lead for spills, and that the issue requires looking at the responsibilities of all the federal agencies. 19428

Understanding impacts of spills on fish stocks

Looking at page 45 in Exhibit E9-21-08, Ms. Thorkelson noted that DFO concluded in its

evidence that the impacts from a spill on fish would depend on many variables, as well as ecosystem recovery. She proceeded with questions about the unpredictability of salmon stock runs, which Mr. Peacock confirmed, vary greatly from year to year. Mr. Groves indicated that stock assessment of herring is less variable than salmon, and that ground fish stocks and crabs, prawns, shrimp, geoducks, urchins and clams, are not assessed. 19434

Ms. Thorkelson asked how the DFO would know when a stock has recovered, if under normal circumstances, without the occurrence of an oil spill, stock size is so variable and difficult to determine. Mr. Peacock explained that the same recover benchmarks would be used, meaning it would e difficult to determine what is slowing recovery of stocks. 19475

Noting that the DFO has said that NGP would compensate for any injuries to commercial fisheries, Ms. Thorkelson asked how difficult it would be to determine impacts of an oil spill, given the difficulty of understanding fish stocks. Mr. Peacock answered, "since we have such a variation in both freshwater survival and ocean it would be very challenging for us." 19484-19489

Mr. King added comments about the ability to assess chemical elements in fish to understand impacts of a spill. Ms. Thorkelson spoke about previous testimony from NGP's experts regarding the difficulty of using chemical data to understand impacts on fish, citing huge variations between government and industry scientists on the subject. 19492

Ms. Thorkelson asked, "are you really telling the Panel and our members that they have nothing to fear regarding dilbit tanker traffic… to and from Kitimat?" Ms. Antcliffe answered with similar comments to those previous, citing "multiple federal agencies" who have authorities for understanding effects of oil spills. She also noted recommendations that Canada has provided to better understand the likelihood and effects of spills on fish. 19509-19521

Examination by Mr. Bernie Roth for Northern Gateway Pipelines 19532

Mr. Roth highlighted excerpts from DFO's evidence, Exhibit E9-6-13, including the Proponent's commitment to long-term monitoring to establish fisheries benchmarks and impacts from oil. He also brought up an excerpt which states that the Department views risks to fish and fish habitat from the Project to be manageable through appropriate mitigation and compensation measures. Ms. Antcliffe agreed with the references. 19532

Examination by Mr. Andrew Hudson for the Joint Review Panel 19566

Limited knowledge of fate and behaviour of spilled dilbit

Mr. Hudson asked for confirmation that previous questioning had revealed that Environment Canada was not yet satisfied with NGP's data on suspended sediment in the CCAA and implications for mixing with spilled oil. Dr. Hollebone agreed. Mr. Hudson asked further questions on the subject, specifically related to Volume 145, line 18009-18014. Dr. Khelifa provided details about current knowledge on the subject. 19569

Mr. Hudson asked for additional details of the type of suspended sediment data that Environment Canada is still seeking. Dr. Khelifa and Ms. Maclean spoke further about the complexity of the questions involved, and the type of research still needed. 19594

Mr. King confirmed for Mr. Hudson that DFO does not yet understand whether diluted bitumen will sink or float if spilled in water. 19608

NGP's fish compensation plan

Mr. Hudson asked about the conceptual marine fish and fish habitat compensation plan that NGP had submitted, in July, 2012, shown in Exhibit B80-14. Mr. Engelsjord indicated that DFO met with NGP to hear about the plan once it became available. He indicated that the meeting did not involve much discussion and that the Department did not have any outstanding concerns around the plan. He also answered that the compensation options are ones that are typically seen by DFO. 19617

Discussion continued around the considerations needed for compensation ratios. 19627

Mr. Hudson asked for general concerns around NGP's draft framework for its marine environmental effects monitoring program, Exhibit B46-38. Mr. Engelsjord indicated that it was too early to determine if there were any concerns with it. Discussion continued around Environment Canada's recommendations for continual monitoring of the project. 19632

Allowable harm to marine mammals and destruction of critical habitat

Mr. Hudson referenced DFO's written statements about the *Species at Risk Act*, which prohibits impacts to listed species. He highlighted findings from Exhibit E9-2-1, section 10, that the Project's marine-related transportation may cause distribution and abundance changes of marine mammals within the CCAA, but that such changes would affect the long-term viability of the populations. He asked for clarification around allowable harm. 19665

Dr. Ford indicated that the information was referring to behavioural response whereas allowable harm is based on mortality. Ms. Sandgathe explained the provision of permitting under *SARA* for allowable harm, indicating that if an activity results in mortality "below the allowable harm limit, then we might be more likely to issue a permit." 19674-19683

Dr. Ford spoke about the impacts of acoustic effects on mammals from underwater noise, indicating that further study is needed to better understand "the point at which animals may be displaced from an area due to noise". Discussion continued on the considerations given to impacts on a population level versus an individual level. 19686-19689

Indicating he understood *SARA* would legally protect critical habitat, Mr. Hudson asked for clarification of the term *critical habitat destruction*. Ms. Sandgathe explained the Act provides a definition of critical habitat, "habitat that is necessary for the survival or recovery of a species", and that once a habitat has been protected, destruction of it is

prohibited. Dr. Ford elaborated on the Act's implications for destruction of critical habitat, pointing out the importance of feeding sites. 19694-19700

Mr. Hudson asked if Dr. Ford thought the cumulative effects of shipping noise could destroy critical habitat for whales. Dr. Ford agreed that such activity could result in the destruction of habitat, pointing out that species aren't present in areas of intense human activity and noise, but added that we don't know what levels of noise would cause such habitat destruction. 19701

Mr. Hudson asked how we can protect against the destruction of critical habitat. Dr. Ford spoke about the large body of research being conducted in an effort to understand the levels at which animals suffer and critical habitat is destroyed. He also suggested that mitigating noise is a large area of research, and pointed out that slowly ships may be more harmful to animals because it prolongs exposure to noise. He concluded by stating that many questions still need to be answered. 19708

Researching impacts on cetaceans

Mr. Hudson asked about DFO's calculations of Potential Biological Removal (PBR), from Exhibit E9-4-1. Dr. Ford described the types of incidents to be used for the calculation, such as ship strikes and oil spills. 19715

Ms. Sandgathe discussed DFO's plans for a humpback whale recovery plan and the potential downgrading of the species to that of "Special Concern", from its previous categorization of "threatened". Dr. Ford added comments about DFO's current research on the Canadian Pacific humpback population 19726

Looking at statements in Exhibit E9-21-14, Mr. Hudson asked about the status and scope of DFO's studies of cumulative shipping noise on killer whales. Dr. Ford provided details on the Department's research efforts. 19740

Noting NGP's statements from Exhibit B83-2, regarding its interest in working with DFO to develop guidelines for large vessel operations in the CCAA and OWA, Mr. Hudson asked if DFO was developing guidelines for industry to address effects of large vessel operations on cetaceans. Dr. Ford explained the department's efforts to understand mitigation tools to reduce impacts. He also mentioned informal discussions with NGP about undertaking future studies of the effectiveness of whale detection methods. He again spoke about the Proponent's commitment to reduce vessel speed, and the need for greater research to understand the effectiveness of such efforts. 19748

Examination by Member Kenneth Bateman of the Joint Review Panel

19764 & 19877

Opinions of the evidence regarding fate and behaviour of spilled dilbit

Member Bateman asked Dr. Dettman for details of dilbit characteristics, asking for her perspective of NGP's evidence on the subject. Dr. Dettman provided general comments of her understanding of the preparation of the product for shipping, and her understanding that the product would initially float if released from the pipeline into water. Member

Bateman asked for details of the fate of the product after initial release, from other witnesses. 19766

Dr. Hollebone spoke about the uncertainty from the evidence of dilbit's rate of change when spilled, and the available timeframe to recover the product. He explained that fate of the product is not as simple as sinking or floating, but that the product may float, sink and linger in the water column, all three of which options present concerns to the environment. Dr. Hollebone provided further explanation using the depiction of an evaporation curve from Exhibit B16-31, Adobe 24. Discussion continued and the witness raised questions of the Proponent's data in regards to droplet size formation in wind or waves and sediment interaction. 19778

Dr. Khelifa discussed his perspective in regards to modelling behaviour of the product. He stated the lack of quantitative understanding in regards to the process of suspended particulate matter and mixing energy creating smaller droplets, as well as the need for better models to predict dilbit's evaporation process. 19822

Mr. King added his thoughts, explaining his area of research around oil sediment interactions. Dr. Dettman provided further explanations of the effects of various combinations of bitumen and diluents in regards to evaporation and other processes. 19839

The witnesses' thoughts on further research needed

Following Member Matthews' questions, Member Bateman continued, asking for further details of the witnesses' views of the need for further scientific study including where they should take place, time frames and other details, in order for the Panel to have conclusive information for its decision-making. 19878

Dr. Hollebone referred to a 5-year study done on Orimulsion in the late 1990s, voluntarily conducted by the company in conjunction with federal government departments, which was in his mind when making recommendations for NGP's project. 19880

The witnesses proceeded to provide explanations of the respective government department work being conducted to assist the Panel's decision making, and the expected timeframe for completion of their work. Dr. Caza pointed out the work being conducted is at the planning stage only, and hasn't always been approved. 19894

Dr. Hollebone described DFO's proposal for a 3-5 year plan in an attempt to answer a range of questions that have been raised including fate and behaviour of approximately 12 products, shoreline behaviour, and suitability of dispersant use. 19899

Dr. Khelifa described EC's plans to develop a behavioural model to better understand oil and sediment interaction in local conditions, in conjunction with DFO. He continued to describe his hopes for the types of models to be developed and pointed out the lengthy process involved with such projects, stating, "I don't want to rush. I think this is a long-term project, assuming that project is going forward. I want to see a good model, a real

model, a good science there, and that requires time… I believe it's most likely post-approval". 19909-19920

Mr. King described DFO studies on the fate and behaviour of two dilbit products, which are weathered and then spilled in a wave tank with simulated sea state and environmental conditions. Cold-water studies will also be conducted and the use of spill-treating agents will also be tested. Mr. King continued with further details of his research, and how it will be joined with that of the other witnesses. 19922

Dr. Dettman described NRCan's work, which has typically involved understanding refinery complications due to species in oil. She explained that the Department has industry contacts that facilitate delivery of oil samples for research. 19933

Thoughts on the conclusions of NGP's Witness Panel Number 2

Member Bateman asked for the witnesses' perspectives of the Panel's understanding of the conclusions of the NGP Witness Panel Number 2, which resulted in 6 summary statements. 19944

The first summary statement was that a significant spill would affect the natural marine environment, including surface water, particularly if it reaches the intertidal zone. The witnesses agreed with the statement. 19946

The second statement is that a spill's impact "*would be particularly negative to species sensitive to the toxic properties of oil in the affected marine area, particularly those whose habitat is primarily on the surface water*." Dr. Esler agreed, though noted that it would depend on other attributes of the species, and that sensitivity of species is not just limited to toxicity issues. Mr. King, Dr. Ford, Mr. Groves and Dr. Hollebone added their thoughts on the issue, each pointing out additional considerations. See transcript for details. 19952-19976

The third statement was, "*a marine environment will, after the initial impact of an oil spill, naturally restore itself to its pre-spill environmental state*." Dr. Esler talked about the need to define and consider *effect* and *recovery*, describing a variety of implications of such terms. Member Bateman asked for Dr. Esler's thoughts on time considerations in this context, which Dr. Esler provided reflections on. Of note, he stated, "effects of a spill won't go on in perpetuity. There will be a recovery of the system and the components of that system will recover across a wide variety of timelines." 19977-19995

Dr. Hollebone provided further information on the long-term effects of oil in an environment, referring to the Kalamazoo, for example, where original species have been replaced by a different set of species following the oil spill. 20003

The fourth summary statement was "*full recovery by oil affected species with few, if any exceptions, occurs over time*". Dr. Esler agreed. Dr. Ford also agreed and added that species have different recovery rates, with some taking far longer than others. 20010

Member Bateman noted that previous testimony had revealed that whales, otters, and herring have still not recovered from the Exxon Valdez spill, probably because of additional circumstances. He asked for the witnesses' opinions on the subject. Dr. Ford explained his understanding that following the spill, certain killer whale groups experienced "unprecedented mortality...in an otherwise fairly high survival species and that these groups were observed in or swimming through oil or in the vicinity of the spill...subsequent to the incident". He pointed out the uncertainty of associating the mortality directly to the spill because the whale carcasses were never seen. He concluded, "the weight of the evidence suggests that the mortalities of these animals was most likely related to the oil spill" rather than other causes as suggested in another publication. 20017-20026

Dr. Hollebone explained that assessments of the spill's impact on sea otter populations have been uncertain because of the complicated population trends of the species in the region overtime as a result of ecosystem changes. He did note that there are documented cases of oil being present in excavated pits of otters in the intertidal zone, which represents a pathway for continued exposure to oil. 20027

Mr. Groves spoke about the difficulty of estimating impacts of the spill on herring populations because of their tendency to stray. He added the concern that other species in addition to the three mentioned may not have recovered following the spill, and haven't been included because they weren't measured prior to the spill. 20030

Dr. Esler added that a disease is known to have played a factor in the changes to the herring populations in Prince William Sound, though it is not known whether the disease was exacerbated by the spill. He also spoke about pigeon guillemots, which have been noted as a species that hasn't recovered by the Exxon Valdez Oil Spill Trustee Council. He pointed out that the species had been declining prior to the spill so it is difficult to know to what extent the spill contributed to a continued decline. 20043

Member Bateman asked for opinions on summary point four, "*human intervention in the marine oil spill can help direct and accelerate the natural resonation process of the environment and for species recovery.*" 20049

Mr. King indicated that there are remediation methods that can help clean up a site, and spoke about microbes that consume and break down oil. Dr. Hollebone pointed out that Panel 2 would be speaking about recovery and response. 20052

Member Bateman highlighted NGP's final statement that the conclusions of the first five statements "would apply without qualification to a dilbit spill event in a marine environment." Dr. Caza responded that Environment Canada has asked for additional information in areas where there are still questions, and said they would agree with the statement "that says without qualification... recognizing those information gaps". Ms. Antcliffe agreed with Dr. Caza's remarks. 20057-20062

Examination by Member Hans Matthews of the Joint Review Panel

19853

Member Matthews followed up with questions for Dr. Dettman around dilbit mixtures and the effects of temperature. The witness provided further explanation. Please see the transcript for details. Ms. Maclean added comments about Environment Canada's further research, pointing out that the timelines are up to the Panel to decide. 19854

Member Matthews asked questions of Dr. Hollebone in regards to the research needed to understand the behaviour of dilbit under normal water temperatures and in regards to evaporation. Dr. Hollebone spoke about the need for more research to understand the rate of change of the various components of products in regards to evaporation, dissolution and other processes. 19862

Member Matthews noted that previous testimony revealed there is no regulation governing the use of dispersants. He asked what authority would be responsible for approving the use of burning as a spill response strategy. Mr. Hogg answered that there are no laws permitting such actions, and pointed out the need to consider environmental and human health impacts of burning. 19870

Examination by Sheila Leggett, Chairperson of the Joint Review Panel

20064

Net environmental benefits

In the context of previous oil spills, The Chairperson asked, "what has been the experience of the application of net environmental benefit on a historical basis?" Dr. Hollebone explained that the framework is called *endpoints*, which helps decide when to end recovery efforts. He mentioned that in some cases, clean-up efforts can further destroy habitats, so consideration has to be made there, and some oil often has to be left in the environment, concluding "in general, it's a compromise and you have to make that benefit decision on a case-by-case basis, often a site-by-site basis within the spill area". 20065-20073

The Chairperson followed up, stating her interest in hearing the practical experience, as opposed to the theoretical application, in the environmental effects of applying the net environmental benefits principle to remediation efforts. 20074

Mr. Hogg spoke about the response efforts for a recent spill in the St. Lawrence River, which involved modelling the fate and behaviour of the oil and considering the environmental impacts of various recovery strategies. 20078

The Chairperson asked how much experience Environment Canada has with the application of the principle, inquiring if it is routinely applied to oil spill scenarios. Dr. Hollebone answered that key environmental considerations are routinely discussed by various stakeholders when planning recovery strategies. 20085

The Chairperson continued, asking if lessons have been learned from the application of net environmental benefit in a particular case. Drawing on his experience with the Kalamazoo spill, Dr. Hollebone explained that decisions have to be made based on

limited information on an ongoing basis, adding, “the more prepared you can be, the more you know about this product, the more you know about the ecosystem that will... possibly receive the product, the better off you are”. 20089-20096

Introduction by Mr. Brendan Friesen for Government of Canada 20139

Gov’t of Canada Panel 2 - Operations, Safety, Accident Prevention/Response and Submarine Slope Failure and Tsunami Potential

Mr. Friesen introduced the witness panel members, their areas of expertise and evidence they are qualified to speak to. The witness list for Prince Rupert and their CVs is in Exhibit E9-53-4, and the witness panels and statement of issues is in Exhibit E9-53-5. Because there are 29 witnesses, readers wanting more detail are encouraged to resort to the transcript, beginning at paragraph. 20137

Examination by Ms. Rosanne Kyle for Gitxaala Nation 20266

Ms. Kyle asked about data on suspended particulate matter in Principe Channel and Dr. Lintern indicated that he wasn't aware of the Canadian Government or Natural Resources Canada having such data. 20268

Spill response strategy based on the sinking or floating of spilled substances

Ms. Kyle then asked Dr. Caza about environmental assessment methodology, inquiring if she would agree, “in order to assess the effectiveness of mitigation measures it’s necessary to understand what the potential effects might be”. Ms. Maclean answered that she felt “the effectiveness of mitigation measures could be studied independently of a particular project” Discussion on the subject continued and Ms. Kyle moved to asking about the importance of understanding whether spilled oil would sink or float in order to plan spill response strategies. 20276-20288

Dr. Caza responded to the question indicating, “it’s not really an environmental assessment question” and explaining that experts from different fields would have different strategies. Dr. Hollebone added that the question of sinking or floating would strongly affect clean-up strategies. Mr. Murdock spoke on behalf of the Canadian Coast Guard stating that the department would seek advice from Environment Canada on the subject and adapt its response equipment accordingly. 20289

Responding to questions about the Coast Guard’s experience, Mr. Murdock noted, “we have limited experience I would say with heavy oils that have sunk… the majority of our experience is with product that has remained on the surface…I would say we have had no experience with sinking oil product”. 20305

Oil tanker moratorium and voluntary tanker exclusion zone

Referring to evidence in Exhibit E9-6-15, Ms. Kyle asked if it was true that there is no moratorium on oil tanker operations in Western Canadian waters. Mr. Roussel confirmed the statement, indicating there is a voluntary tanker exclusion zone, as referred to in the exhibit. 20311

Discussion continued on the subject with Ms. Kyle seeking to understand the extent of an exclusion of oil tankers in the region and Mr. Roussel reiterating, “there is no law and there is no regulations that prohibit tanker traffic in Canada”, confirming, “there is no other policy in place other than the tanker exclusion zone in relation to oil tanker traffic”. 20316-20321

Ms. Kyle asked if Mr. Roussel agreed that there is a lack of consensus within the Canadian public as to whether there is an oil tanker moratorium on the West Coast, and the witness declined to give an opinion, referring back to the official legislation. 20324

Ms. Anderson objected to the repeated question on the subject, and Ms. Kyle indicated that there are Aboriginal communities who believe there is a tanker moratorium, and have concerns about the project in question in relation to the moratorium. 20330

Discussion continued around the difference between a voluntary tanker exclusion zone and an oil tanker moratorium. Mr. Roussel provided background as to the rationale of the exclusion zone, confirming that it was intended to address environmental concerns as well as safety concerns for fishing vessels in the area. 20334

Ms. Kyle sought further details of the basis for the voluntary exclusion zone, and Mr. Turner explained that the zone varies in different areas, but that it generally keeps tankers approximately 45 nautical miles away from Vancouver Island and 75 from Haida Gwaii. He confirmed that the exclusion zone was put in place in 1988. 20351

Trans-Alaska Pipeline System routes and the voluntary tanker exclusion zone

Ms. Kyle asked about the history of the voluntary Trans-Alaska Pipeline System (TAPS) routes from Alaska to West Coast US ports, calling up Exhibit D72-14-40 for details. Mr. Turner confirmed his understanding that the TAPS routes were established in 1977 in an effort to address environmental concerns of tanker groundings, and were cancelled in 1982. 20378

Mr. Turner discussed a tanker drift study in the mid 1980s, which established an area off Canada’s West Coast where disabled tankers could drift ashore before the arrival of tugs in unfavourable weather conditions. As a result of the study, the American and Canadian Coast Guard’s as well as the American Institute of Merchant Shipping agreed on the tanker exclusion zone along the BC coast. 20415

Ms. Kyle asked if Mr. Turner agreed that the tanker exclusion zone would not apply to NGP’s tanker routes, and he agreed pointing out that the exclusion zone was intended for US bound oil tankers. Mr. Roussel confirmed that NGP’s tankers would travel outside the exclusion zone. 20433

More on Canada’s position on an oil tanker moratorium policy

Mr. Roussel of Transport Canada, agreed with Ms. Kyle’s understanding that the only moratorium that exists along Canada’s west coast “is in relation to offshore oil and gas development” according to the Government of Canada. Ms. Kyle again sought agreement

that “there have been inconsistent statements made by the Canadian government in the last 10 years or so with respect to whether there is an oil tanker moratorium off the west coast of Canada”, and Mr. Roussel disagreed. 20443

Ms. Anderson objected to the line of questioning, noting that the Panel had ruled that Gitxaala Nation wasn’t permitted to question on the tanker moratorium unless specifically referring to the Government’s evidence. Ms. Kyle stated her anticipation to the objection and argued that it would be “prejudicial” to prevent Gitxaala from being able to test the Government’s evidence and position on the subject of the moratorium. 20458

After a break, the Panel ruled that the tanker moratorium is part of the Federal Government’s evidence, and therefor permissible for questioning. Ms. Kyle re-stated her question and Mr. Roussel indicated that there had been statements made by politicians on a tanker moratorium, which had to be corrected. He also noted that there were two private member bills seeking to formalize the tanker exclusion zone into law, Bill C-606 in 2011 and Bill C-437 in 2012, neither of which were supported by the Government. 20480

Discussion on the moratorium continued, and Mr. Roussel further explained that the voluntary exclusion zone doesn’t apply to tankers travelling in and out of Canada. 20496

Ms. Kyle asked about the public review panel in the early 2000s led by Roland Priddle on oil and gas activities off BC’s coast. Mr. Clarke of Natural Resources Canada (NRCan) answered questions on the report in relation to a potential tanker moratorium. He pointed to Exhibit E9-21-09, Adobe 98-99, which includes an erratum, “*In 1972, the Government of Canada imposed a moratorium on oil and gas exploration and development activities offshore British Columbia, not a moratorium on crude oil tanker traffic*.” Discussion continued on the terms of reference of the review in relation to the above erratum from the Government. 20499-20544

Ms. Kyle asked about Transport Canada’s consideration of the Priddle review Terms of Reference in preparation of their evidence on the tanker moratorium for the JRP hearings. 20545

Ms. Kyle brought up other Government documents that refer to a tanker traffic moratorium, including an NRCan document, Exhibit D72-15-13, Adobe 4. She highlighted the statement, “*In 1972, the Government of Canada imposed a moratorium on crude oil tanker traffic*”. Mr. Roussel and Mr. Clarke indicated that the document was a Statement of Work, and differentiated it from legislation, regulation or Order in Council. Mr. Clarke explained that the statement made the same error that the previously mentioned Exhibit provided an erratum for, confirming there was no moratorium in 1972, despite an error being made in several government documents indicating otherwise. 20565

Discussion on the topic continued at length. The witnesses repeated that the voluntary exclusion zone exists, and doesn’t impose restrictions on tanker traffic in and out of Canada. Ms. Kyle pointed to Adobe 8 of the same Exhibit where it was indicated that a

Cabinet Directive for a Strategic Environmental Assessment would be required to change the west coast moratorium. Mr. Clarke again differentiated between the oil and gas moratorium and the tanker moratorium. 20589

Mr. Clarke answered questions about procedures around Cabinet Directives and the requirements for Strategic Environmental Assessments. He agreed that the public review panel process was supposed to be a strategic environmental assessment of the offshore oil and gas development moratorium, and Ms. Kyle questioned whether it was strictly limited to oil and gas. Discussion continued. 20604

Ms. Kyle brought up two Government slide decks from 2004, Exhibit D72-15-17, and Exhibit D72-15-19, both of which indicate a Canadian imposed tanker moratorium. She directed continued discussion around the terms of reference for the Public Panel Review Report around the oil and gas moratorium, which originally referred to a tanker moratorium. Mr. Clarke indicated that the erratum he previously called up refers to those terms of reference. 20639

Ms. Kyle brought up the Royal Society of Canada review, which happened in tandem with the above mentioned public panel review, and is found in Exhibit D72-17-20. She asked the witness to review statements about the review's conclusions, which again make reference to a tanker moratorium. Mr. Clarke again stated that he agreed with what was in the documents, but that the documents contained errors. Ms. Kyle pointed out that no errata have been made for the Royal Society's terms of reference and discussion continued. 20682

Ms. Kyle then walked the witnesses through a government Media Lines document, Exhibit D72-15-37, Adobe 4, which again makes reference to a tanker moratorium. Similar discussion ensued. 20715

Exhibit D72-15-43, Adobe 8 was brought up, a 2004 NRCan slide deck which refers to the Royal Society panel conclusions, including "*transit tanker traffic ban in coastal zones should be maintained for the time being*". Mr. Roussel indicated that such documents were not considered by Transport Canada in its preparation of evidence for the JRP. 20751-20762

Ms. Kyle asked the witnesses were are aware of former MP, David Anderson's concerns that NGP Project is inconsistent with the oil tanker moratorium which he saw as being in existence, as expressed in his letter, Exhibit D72-15-46, Adobe 5. Mr. Roussel indicated he was aware of Mr. Anderson's comments. Minister of Natural Resources, Mr. Efford's response to Mr. Anderson's letter, at Adobe 2, was brought up and discussed. 20769

Ms. Kyle asked if Mr. Clarke agreed that errors on the tanker moratorium were first realized in 2005, when the issue was raised in the context of NGP. Mr. Clarke answered that he did not know when the error was first noted and by whom. 20801